JPRS-UEA-86-003

12 February 1986

USSR Report

ECONOMIC AFFAIRS

FBIS FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service (NTIS), Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semimonthly by the NTIS, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS-UEA-86-003

12 February 1986

USSR REPORT

Economic Affairs

Contents

ECONOMIC POLICY, ORGANIZATION AND MANAGEMENT

AGANBEGYAN, BUNICH SPEAK AT ECONOMIC MANAGEMENT CONFERENCE

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 8, Aug 85 pp 127-128

[Article by A. Rutitskaya and A. Yusov: "Planning and Economic Levers for Controlling the National Economy"]

[Text] The All-Union Scientific-Practical Conference, dedicated to improving the planning and economic levers which control the national economy, has taken place at the Academy of the National Economy under the USSR Council of Ministers. Representatives of the USSR State Planning Committee (Gosplan), State Committee on Prices (Goskomtsen), State Committee for Science and Technology (GKNT), State Committee for Material and Technical Supply (Gossnab), All-Union Council of Scientific and Technical Societies (VSNTO), the union and republic departments, the Archives of the National Economy (ANKh) under the USSR Council of Ministers, scientific-research organizations of the USSR Academy of Sciences, and higher educational institutions took part in its work.

Opening the conference, the rector of the Academy of the National Economy Academician, Ye. M. Sergeyev, noted that the present stage of developed socialism demands elaboration and strengthening of the effectiveness of planning and economic levers of management, in order to come out in the most advanced scientific-technical positions and on the universal productivity level of social labor. All of this accounts for the special urgency of the questions under discussion.

Corresponding member of the USSR Academy of Sciences P. G. Bunich stressed the factors holding back introduction of scientific and technological achievements into production. Among these are the enterprise collectives' insufficient material interest in realizing the newest technological innovations, the enterprises' and production associations' receipt of a significant portion of financial resources free of charge, and the low efficiency of the incentive system, which is caused by the large number of independent forms of bonus awards and unequal incentives. To the speaker's mind, to eliminate these shortcomings it is expedient to appraise the results of the enterprise collectives' activity on the basis of net output. As to improving labor payments, the speaker expressed the opinion that the labor payment fund must consist of a wage (salary) part (nearly 75 percent of total earnings), a standard surplus wage part (a majority of enterprises must be able to receive it) and an above-standard surplus wage part (for the successfully operating collectives).

The paper devoted a great deal of attention to the first results of the wide-scale economic experiment. The experiment's success will depend in large part on the level of its adaptation in conditions of the internal khozraschet (economic accounting) mechanism; that is, the most advanced links of the national economy should extend the principles of the experiment from the management level to the working place.

Addressing questions of scheduled price-setting, the chairman of the USSR State Committee on Prices, N. T. Glushkov, noted that under conditions of the planned increase in social productivity the main principle of improving wholesale prices and tariffs in industry and transport should be their stabilization and a decrease in the functioning level on the basis of realizing scientific-technical achievements, growth of labor productivity, economy of resources and the lowering of net costs. The new wholesale prices and tariffs introduced in 1982 conform as a whole with the demands of the active economic mechanism and will create the necessary conditions for the development and strengthening of cost accounting and implementation of the achievements of scientific-technical progress. The lowering of prices from 1 January 1985 for electronic industry production was regarded as one of the most important measures; it will allow technical re-equipment of other sectors of the national economy. The speaker dwelt also on price formulation in the coal industry. The conditions for formulating prices on gas were set on the basis of 1985 coal prices. This method has spread to other types of fuel so that coal will be cheaper than gas, while mazut will be significantly more expensive than gas. The paper also developed the fundamental work trends in perfecting price-setting to promote a scientific foundation for all of the elements of prices.

The Deputy Chairman of the USSR State Committee for Material and Technical Supply, B. M. Yakovlev, concentrated on the activities of material-technical supply organs under the conditions of the experiment. The rights to effective regulation of problems related to supplying the enterprises participating in the experiment have been extended to Gossnab's territorial organs. And there is also great room for improvement in the material-technical supply and delivery of output.

The improvement of fulfilling output volume indicators, taking into account the agreed-upon production supply needs, is a most important result of the extension of rights in the sphere of material-technical supply. In the speaker's opinion, the main cause for the imbalance of production plans with material-technical provision according to the products schedule is the disagreement between deadlines for received applications for resources and the construction of production plans. Applications for material-technical resources on the basis of rough draft plans lead to changes in issued orders for delivery of output. The difficulties in fulfilling special orders of production are aggravated by strong demands for wagon capacity, which are caused by the mandatory maximum use of rolling-stock because of the constantly strained balance of the means of transport.

Academician A. G. Aganbegyan set forth development trends in a full economic accounting of industry. Work must be oriented toward: perfecting the management system in the fullest subordination of production to the interest of

satisfying social demands; the utmost intensification of social production both in every production sector and at the meeting point between these sectors and consumers; the radical acceleration of scientific-technical progress by means of replacing out-dated technological systems with new ones based on the technology of the coming generation; the democratization of management and the development of economic initiatives below bearing in mind national economic interests. The speaker focused on problems related to rebuilding the management system, conversion to a two-link system of economic management based on creation of strong and efficient scientific-production organizations and production organizations. Supply enterprises should be subordinated to them, regardless of their departmental and regional affiliations.

The division director of Gosplan, D. V. Ukrainskiy, and the deputy division director of Gosplan, O. M. Yun, spoke of the substantial changes in planning system indicators, their being brought to the labor fulfillers' level, and the fulfillment of net output volume, accounting for deliveries. (Footnote 1) (See D. Ukrainskiy, "Results of Work Under New Conditions," PLANOVOYE KhOZYAYSTVO, 1985, No 6)

The conference adopted recommendations for the furthest extension of enterprises' economic self-sufficiency and the simultaneous strengthening of the central authority in economic management.

12926/12379
CSO: 1820/16

COST-EFFECTIVENESS OF PLANT RENOVATION, RETOOLING SURVEYED

Moscow VESTNIK STATISTIKI in Russian No 8, Aug 85 pp 12-18

[Article by F. Glistin, candidate of economic sciences, department chief of the Scientific Research Institute of the USSR Central Statistical Administration, I. Perepechin, candidate of economic sciences, division chief of the Administration of Statistics of Capital Construction of the USSR Central Statistical Administration, and V. Sitnik, senior scientific associate of Scientific Research Institute of the USSR Central Statistical Administration: "Technical Reequipment of Industrial Enterprises"]

[Text] Technical reequipment is an important source of increasing the economic effectiveness of the national economy and a means of maintaining and accelerating the rates of reproduction of fixed capital as well as intensifying the national economy. Although the possibilities of technical reequipment and the areas of its utilization are not unlimited, and cannot fully replace other directions for capital investments, they are clearly great and should be utilized to the maximum degree.

In order to study the economic effectiveness of expenditures on technical reequipment, the USSR Central Statistical Administration in 1984 conducted a program developed in conjunction with the Scientific Research Institute of the USSR Central Statistical Administration for investigating enterprises of 11 machine-building ministries.

The program of investigation envisioned revealing the volume of the corresponding expenditures, their technological structure and the length of time it takes to carry out technical reequipment, and also the proportion of replaced equipment, the utilization of the fund for the development of production, the amount of expenditures on environmental protection, and so forth.

Expenditures on technical reequipment were compared with the increase in profit, the increase in output and the reduction of the number of workers, including those employed in manual labor, which obtained as a result of technical reequipment. This approach corresponds to the "Standard Methods for Determining the Economic Effectiveness of Capital Investments," approved by the USSR Gosplan, the USSR Gosstroy and the Presidium of the USSR Academy of Sciences in September 1969, and other analogous methodological documents (in

particular, the "System of Indicators Which Jointly Characterize the Economic Effectiveness of Capital Investments," approved by the USSR Central Statistical Administration in April 1983).

All other conditions being equal, not only increasing the volume of output of products, but also reducing the number of workers leads to an increase in profit since this means a reduction of the wage fund and current production expenditures. At the same time these factors have a completely independent and very great significance for economic analysis of the effectiveness of capital investments. An especially essential role is played by a reduction of the expenditures of live labor and increased labor productivity.

One of the tasks of the investigation was to compare the economic results of technical reequipment with similar indicators achieved as a result of capital investments in new construction, expansion and reconstruction. Therefore the methodological approach was basically the same as the one used previously for many years when investigating the economic effectiveness of expenditures in new construction, expansion and reconstruction of industrial enterprises, including in machine-building ministries.

As the main indicator of results they utilized the coefficients of reimbursement (recouping) capital investments, which were calculated on the basis of actual, planned and normative initial data. They represent the total profit obtained as a result of investments during the period of operation since the startup divided by the corresponding capital investments. The amount of this coefficient depends on the duration of operation. The more time that has passed since startup, as a rule, the higher the coefficient of reimbursement. Therefore when analyzing its amount it is necessary to take into account the duration of operation in all cases when comparing figures for a number of enterprises (or several groups of them among one another) that have been functioning for differing lengths of time since startup. In these cases the total profit must be determined for an identical (comparable) time period, after which the coefficients of reimbursement calculated on its basis can be compared with one another.

The investigation was based on a comparison of the actual, normative and planned coefficients within one and the same enterprise.

In order to calculate the normative and planned coefficients of reimbursement they used the normative time periods for construction and asssimilation, and also the profit according to the norm or according to the plan. The normative coefficient of reimbursement shows which proportion of the capital investments would have been recouped if, in the first place, the work had been completed during the normative time periods (or the time periods envisioned by the plan), second, the introduced fixed capital had been assimilated fully in keeping with the norm and, third, the amount of annual profit corresponded to the normative coefficients of the effectiveness of capital investments. Thus the normative coefficient of reimbursement (recouping) characterizes the economic result which should have been obtained with strict observance of all norms that regulate the investment process.

Observance of the norms of effectiveness is the minimum that is necessary to envision in planning decisions. As a rule, the coefficient of effectiveness calculated according to planning data should be higher than the norm. The planned coefficient of reimbursement is distinguished from the normative one only by the fact that to calculate it instead of profit that corresponds to the norm one uses profit according to planning data. The other constituents--norms of duration of construction and assimilation--are the same when determining both the normative and the planned coefficients of reimbursement.

The indicators obtained as a result of the investigations characterize the fairly high effectiveness of capital investments in technical reequipment of enterprises of machine-building ministries. For this of them where there is planned substantiation of the effectiveness the actual coefficient of reimbursement amounted to an average of 0.51, the planned--0.42, and the normative--0.25. Here the actual time period of operation of these enterprises was equal to an average of 2.5 years. In other words, during 2.5 years of operation the enterprises with planned substantiations of the effectiveness actually recouped an average of 51 percent of the funds spent on technical reequipment while if the norms had been observed they would have recouped only 25 percent of the capital investments during this period, and if they had obtained profit in a volume envisioned by the plan--42 percent. Since in 2.5 years an average of half of the capital investments were recouped, if the profitability is kept at the existing level in the future the total profit is compared with the amount of capital investments on an average for 5 years. This period is interpreted as the time period for recouping them which, according to the norm, amounts to an average of 8-10 years. This shows the high economic effectiveness of capital investments in technical reequipment.

The investigation showed that in the majority of cases technical reequipment is carried out without approved final (containing the technical and economic part) planning estimates. Only 19 percent of the overall number of enterprises investigated had documentation which had been developed and approved, as a rule, in those cases where the technical reequipment had been continuing for several years. But if the reequipment, for example, had involved replacing equipment and had continued for only one year, there were no technical and economic substantiations. In these cases when conducting the investigation the planned coefficients of reimbursement were not calculated and the actual coefficients were compared only with the normative ones.

But the results of the measures that were short-term in nature and not costly turned out to be considerably more effective than those measures for which technical and economic substantiations were drawn up. Expenditures on technical reequipment that were carried out without plans were recouped by 70 percent at the time of the investigation while those that were carried out according to the norm were to have been recouped by only 41 percent. The effectiveness of expenditures on technical reequipment are the higher the greater the proportion of expenditures on updating the active part of fixed capital and the more extensive the introduction of new technical equipment. In keeping with the existing policy, during technical reequipment the proportion of construction and installation work should not be significant, that is, in this case production premises, buildings and structures are

utilized to a maximum degree. Expenditures made at one time on creating these (the passive part of fixed capital) are utilized as if for a second time, and to a much greater degree than with expansion or reconstruction. And with new construction the passive part of fixed capital is not created again at all. It is precisely this thrifty, economical attitude toward the passive part of fixed capital and the possibilities contained in it of functioning for a much longer time that explains the high economic effectiveness of technical reequipment, which also provides for a reduction of one-time expenditures (capital investments) and current production expenditures as compared to other kinds of construction. It is very significant that then the introduction of the latest achievements of scientific and technical progress is also extremely effective.

An important feature of technical reequipment, as the investigation showed, is the relatively short amount of time it takes--an average of 1.6 years. The duration of the investment cycle, that is, the sum of time periods for carrying out capital investments and recouping them, for the enterprises that were investigated amounts to an average of 6 years.

With technical reequipment of enterprises of machine building ministries, in order to create 1 million rubles' worth of new fixed production capital it takes an average of 0.3 years or 3.6 months; on the average for production construction (that is, including new construction, expansion and new construction)--0.62 years or a 2.1-fold increase. The relatively short time lag between expenditures and the startup of fixed capital with technical reequipment makes it possible to utilize the achievements of scientific and technical progress more efficiently and to reduce the time period between the development of new technical equipment and its introduction. At the same time in certain cases technical reequipment which consists only of replacing individual kinds of equipment and machine tools with more modern and productive ones does not make it possible to comprehensively improve production or to introduce principally new technological and technical decisions which require its radical restructuring and also changes in the parameters of building and structures. Therefore with all the economic and social effectiveness of technical reequipment it cannot and should not completely replace new construction. It is necessary to have an optimal--for each stage of economic development--combination of all forms and kinds of expanded socialist reproduction of fixed capital.

Figures concerning the output of products at enterprises that were investigated before and after technical reequipment made it possible to reveal the amount of proportional capital investments. Obtaining one ruble of annual output required 78 kopecks in capital expenditures, which is approximately half as much as the average for all of industrial construction.

After completing the technical reequipment the output of products per one worker at the enterprises increased by an average of 18 percent as compared to the level before the reequipment. There was a considerable absolute release of workers, and in the majority of cases these were workers employed in manual labor. At the same time the volume of production increased, as a result of which the relative release of workers exceeded the absolute number.

The economic and social results of technical reequipment obtained in the enterprises that were investigated were closely linked to the structure of capital investments made at them. On the whole in their totality the proportion of expenditures on construction and installation work amounted to 6.1 percent. At the same time at many enterprises of machine-building ministries the proportion of construction and installation work turned out to be considerably more than the average amount--in individual cases up to 50 percent. There was a corresponding reduction of the economic effectiveness of capital investments.

Expenditures on measures for social purposes (environmental protection, improvement of working conditions and safety, and so forth) at these enterprises amounted to an average of 4.6 percent of the overall sum of expenditures on technical reequipment. Additionally, 3.6 percent of the capital investments went for improving conditions for production and labor and 1 percent for facilities for the protection of nature.

Approximately one-third of all the measures amounted to replacement equipment (without doing other work at the same time; about one-fourth of the measures were for introducing new technology (including the installation of equipment necessary in these cases); and somewhat less than one-fourth of the measures were for mechanization and automation of production.

The main purpose of the measures for technical reequipment was to improve the quality and change the assortment of the products. Approximately one-fourth of all the measures have the goal of improving the conditions and the organization of labor, and about one-fifth of the measures were directed toward reducing the number of workers.

After technical reequipment the volume of output at the enterprises that were investigated increased by an average of 16 percent. The coefficient of updating of products as a result of the assimilation of the production of new kinds of products amounted to an average of 0.015. Many kinds of products that were previously produced but had become obsolete were removed from production after the completion of the technical reequipment.

Materials from the investigation showed that with technical reequipment the time periods for recouping capital investments were about 10-17ths of the average for the totality of enterprises with new construction or expansion and reconstruction of existing enterprises.

For a correct estimation of the economic effectiveness of expenditures on technical reequipment, the investigation envisioned the utilization of the value of worn-out fixed capital that had been removed after the implementation of the given measure (technical reequipment).

The value of the worn-out equipment was subtracted from the sum of capital investments, as a result of which they have obtained the expenditures on increasing fixed capital (pure expanded reproduction) added to the losses from underamortization of prematurely removed fixed capital. This method is based on the fact that the increase in profit (and also output) with technical reequipment can be brought about only by increasing the volume of fixed

capital (rather, operation of this fixed capital which forms its increase), and expenditures on compensation for removed capital only maintain the previous level of production. Including the latter in a comparison with the increase in the profit would mean, essentially, repeated accounting and a violation of the cause and effect relationship. Subtracting the value of worn-out equipment (equivalent to calculated but not utilized amortization) from the overall sum of capital investments is tantamount to adding to the expenditures for increasing the fixed capital the underamortized value of the removed capital. When calculating the coefficients of reimbursement (recouping), the overall (gross) sum of capital investments is reduced by the corresponding amount.

When the investigation was being conducted there were difficulties brought about by the lack of the necessary initial accounting. This pertains first and foremost to the problem of separating out from the general results of economic activity of the enterprise (increased output, increased profit, changes in the number of personnel and so forth) those results which came about because of the technical reequipment, and not other factors (for example, a simultaneous expansion of production, changes in the coefficient of shift work and so forth). At certain enterprises the organization of operational and analytical bookkeeping made it possible to have direct data for determining the corresponding proportion of results, but in the majority of cases this was not available. This was brought about not only by the specific nature of the accounting, but also by the peculiarities of the very measures for technical reequipment of production. It is easier to single out the results from large-scale measures than from small ones.

In cases where the direct figures were lacking, in the investigation they used an indirect method which was based on a conventional, but sufficiently probable assumption that in all sections of one and the same enterprise the output-capital ratio is approximately the same; the proportion of products, profit and other indicators considered as a result of the technical reequipment were taken to be equal to the proportion of fixed capital obtained as a result of this reequipment in the overall value of fixed production capital of the enterprise. Thus if the value of the fixed capital created as a result of technical reequipment amounted to 10 percent of the value of all fixed production capital of the enterprise, then 10 percent of all the profit of the enterprise or the entire volume of its production was compared with the expenditures on technical reequipment.

The existing methodological materials do not contain recommendations of what to do in these cases. In planned investigations of the effectiveness of capital investments at enterprises that are in operation they use the increase in output and profit as compared to their level before the beginning of construction, which is taken as unchanged (at the level of 1 year). This method has the shortcoming that the selected base year can turn out to be atypical (its profit is either lower or higher than in other years). But with respect to an analysis of the actual data one must add to this shortcoming an another one which is no less significant: the utilization of other fixed capital--both that which existed before the measure under consideration was implemented and that which was formed after the measure was implemented--can change significantly in time and sometimes be better and sometimes be worse.

The return from expenditures on the given measure can either increase or decrease if the calculations are conducted with respect to a stable base level (which in reality is not stable at all).

Therefore the principle of proportional distribution of the results seems acceptable and has less error than other possible types of methodological approaches. The question is very important and at the same time it is very complicated. In methodological investigations devoted to an analysis of the effectiveness of capital investments it is rarely touched upon and is essentially almost not studied. The method of proportional distribution was recommended in the "system of indicators which jointly characterize the economic effectiveness of capital investments" which was approved by the USSR Central Statistical Administration in April 1983.

The investigation of the effectiveness of technical reequipment at enterprises of machine-building ministries made it possible to reveal a number of shortcomings along with the positive results. When forming the plan for technical reequipment the comprehensive approach is utilized in far from all cases. We have already noted that the majority of measures are conducted without completed planning estimates which have technical and economic substantiation. But in those cases when these substantiations existed, the quality of the decisions that were made did not always correspond to the established requirements. Thus we found plans in which the effectiveness was planned at a level lower than the normative. The majority of the plans did not envision an increase in the profitability of fixed capital or capital-output ratio. The main indicator which improved appreciably as compared to the level before the technical reequipment was only labor productivity and the reduction of the number of personnel which is related to it. Yet the peculiarities of technical reequipment and the dominating position in it of the active part of fixed production capital makes it quite possible to simultaneously achieve an increase in output-capital ratio along with the increase in labor productivity.

Among the shortcomings that were revealed there was the prolonged underassimilation of planned volumes of production and profit. This is extremely typical not only of technical reequipment, but of all other kinds of reproduction (new construction, expansion and reconstruction).

At the enterprises that were investigated about half of all the expenditures on technical reequipment were made from noncentralized sources of financing, which reflects to a certain degree the initiative of the enterprises and their right to a basically independent selection in the area of technical and economic decisions. Under the conditions of the economic experiment that was conducted there was a considerable expansion of the opportunities for the enterprises to use the funds for the development of production for purposes of technical reequipment.

Results of the investigation showed that it is necessary to observe systematically the actual effectiveness of expenditures on technical reequipment. Beginning in 1985 these investigations (the program for them has basically stayed in the same form in which it was formulated in 1984) are to

be conducted annually, encompassing enterprises not only of machine-building ministries, but all the other basic industrial ministries.

In order to improve the statistical study of technical reequipment, it is necessary to further develop the corresponding theory and practice, coordinating this with the involved organizations.

In 1983 the USSR Central Statistical Administration created a register of construction projects for production purposes in which on each line it gave the most important planning, actual and projected indicators which make it possible to observe the course of construction and predict its results. Apparently we should think about creating such a register for technical reequipment of industrial enterprises, whose data would make it possible to obtain operational information about the composition and cost of this kind of reproduction, the availability or absence of technical and economic substantiations, the proportion of expenditures on equipment, the planned and actual time periods, and so forth. Certain additional labor and material expenditures related to the creation of such a register would be quite justified in a very short period of time.

Among the most important tasks of statistical study of technical reequipment of industrial enterprises one can include improvement of the evaluation of the technical level of technology, machines and equipment, and also production of a whole. Indicators of the technical level, on the one hand, should serve as a prerequisite for developing the plans for technical reequipment and, on the other, should provide an additional way of characterizing its results.

11772
CSO: 1820/257

METHODOLOGY FOR STATISTICAL ANALYSIS OF PLAN QUALITY PROPOSED

Source IZVESTIYA AKADEMII NAUK SSSR, SERIYA EKONOMICHESKAYA in Russian No 4, Jul-Aug 85 pp 16-22

[Article by P. A. Medvedev: "Methods of Analysis of Quality of Plans"]

[Text] The article raises the question of the need for a regular quantitative analysis of the quality of planning and suggests certain methods of a statistical nature which were intended for evaluating the quality of plans for the production of industrial products and material and technical supply (for example, wholesale sales of goods, sales from warehouses and through stores, and so forth).

At the 26th CPSU Congress and subsequent plenums of the CPSU Central Committee a good deal of attention was devoted to the development of initiative, high organization and executive discipline.

Increasing executive discipline, in turn, places greater demands on the quality of the plans. In order for a plan to be fulfilled it must be provided with all the necessary resources. And one needs not simply an integral kind of support (for instance, total production during the year of the quantitative raw material which is needed for producing the planned volume of each kind of product during the year). The balance for the production must be spread out in space and time (for example, raw material must be delivered to the necessary place at the time determined by the technology, the dynamics of other resources and the circumstances of the enterprise that is the consumer of the raw material, which acts in the role of supplier of the products manufactured from it, and so forth). Moreover, the plans must be reasonably taut. The observance of these and other conditions complicates planning tasks extremely. Hence the persistent need to apply methods of analysis of the quality of the plans that are developed.

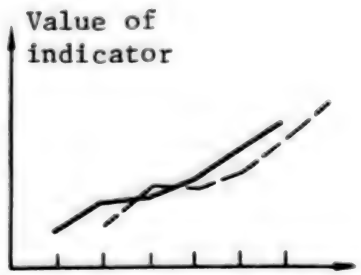
In terms of the time indicator of possible application these methods fall into two groups: a priori and a posteriori. The goals reached by the application of these methods differ essentially. The former are used to reveal shortcomings in the plan before it is approved, that is, to prevent possible planning blunders and mistakes. The latter are used to help form an idea of

the quality of planning, to discover and generalize the positive and negative experience in order to utilize it in subsequent planning work.

Certain methods of analyzing the quality of plans of the former and latter type exist and are used when working on the plan. Among the methods of the former type one should mention first and foremost the informal devices which were applied by planners and which are based on experience and intuition. At various times informal devices have been augmented with a number of more or less formalized procedures: control of integral balance in terms of resources, checking (see, for example [1]) the admissibility of the plan from the standpoint of the amount of structural change to which it leads, modeling of the process of implementing the plan (see, for example, [2, 3]).

Let us discuss the latter method. Its author suggests using the aforementioned model to check on the possibility of fulfillment of the plan. If, according to the model, during the course of the planned period it is not possible to approach with a sufficient degree of precision the actual values of the parameters that characterize production and their planned amounts, then the plan has to be changed. Then the new plan is tested, and so forth. The iterative procedure leads finally to a plan that can be fulfilled (according to the model).

The undoubted merit of the method is its a priori nature, which makes it possible to hope that its application will improve one of the most important characteristics of the plan--its feasibility. But, as we know, modeled results are always different from the actual results to a greater or lesser degree. It is even more necessary to take this difference into account when modeling such a complex socioeconomic phenomenon as the process of fulfillment of the plan. Similar problems also arise when utilizing other a priori methods. Therefore their existence does not remove the problem of studying the actual dynamics of coordination between planned and actual values of indicators.



Conventional symbols:

_____ actual amount

- - - - - - - - - - planned amount

Fig. 1

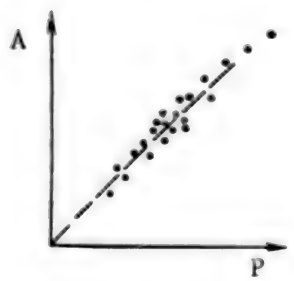


Fig. 2

The existing devices for a posteriori analysis of the quality of plans are poorly formalized and, in our opinion, do not utilize statistical data enough.

It is difficult to interpret each individual divergence between the plan and the actual values. In fact if the plan has been overfulfilled significantly it is not clear whether this was the result of incomplete accounting in it for the possibilities of the performer or the discovery and introduction during the course of the planning period of a principally better technology which could not have been envisioned when drawing up the plan. Similar questions also arise when attempting to distribute the responsibility for underfulfillment of the plan.

The situation changes if one has sufficiently protracted series of planning and corresponding actual values of the indicator. For instance, if each year the plan is appreciably overfulfilled, it would be more correct to explain this as a result of mistakes in planning and not fundamental technical innovations each year.

Let us consider in more detail several methods of drawing up series of planning[1] and actual values of indicators in order to reveal the various characteristics of planning work. A year has been selected as the planning period.

Let us consider the series of planned and actual values of some indicators for a number of years. Since the proposed methods are statistical in nature, it is necessary to have statistical homogeneity of the selections that are considered. This is achieved with sufficient reliability if one discusses the production of industrial products through well-arranged technologies or existing flows of products for production and technical purposes.

On graph paper with one axis representing the years and the other, the values of the indicator, we construct two graphs: the dynamics of planned and actual amounts of the indicator under consideration (Fig. 1).

Even a purely visual analysis of the two graphs frequently makes it possible to draw significant conclusions. Thus one encounters cases in which the configuration of the graph of the actual values repeats almost precisely the configuration of the graph of planned values, if the latter is first set back 1 year. This picture shows that the plans have uncritically carried over the tendencies that took form in the preceding planning period. Here it frequently turns out that the shifted graph of plans is essentially higher than the graph of "facts," that is, for a number of years the planning agency has been formulating the plan without reinforcing it with a system of measures to control its fulfillment.

A purely visual evaluation of the similarity of the configurations of the graph frequently turns out to be inadequate. It is necessary to have a quantitative evaluation of this. Such an evaluation can be provided by the coefficient of correlation.

It is expedient to calculate the coefficient of correlation, like the unmoved series, and compare the values that are received. If the latter turns out to be more, this is an argument in favor of a high evaluation of the quality of planning. The opposite result will mean that the planning amounts are more closely linked to the actual values of the preceding year and not the current planning period. In other words, it reflects poor quality of planning.

More substantial, in our opinion, is information about the coefficients of correlation between series not of the values of the indicators themselves (planning and actual), but their annual relative increases. Here the relative increase in the planning indicator naturally means the different between its amount and the actual (not the planned!) value of the preceding year, divided by the actual value of the preceding year. Indeed, if the actual value of the preceding year is close to the planned value, it is immaterial which difference one uses: they are practically the same. But if the actual indicator of the preceding year differs greatly from the corresponding planning indicator, the difference between the plans has no clear economic meaning: last year's planned value does not reflect the real economic processes.

The information content of the coefficient of correlation between the series of annual relative increases (planned and actual) can be substantiated in the following way. One of the important functions of the plan is to indicate the goal and path of the next stage[2] of the development of production. This development is based on the results achieved by the beginning of the planning period. These results cannot be the object of planning decisions that are made for the new planning. Therefore the task of planners is to determine the increases.[3] The quality of the implementation of this task should also be evaluated. It is precisely for this purpose that one can use the coefficient of correlation between the series of annual relative increases.

Just as in the preceding case, it is useful to compare the amounts of the coefficients of correlation that are calculated between the shifted and unshifted series. In this case a large amount of the first coefficient indicates a regular uncritical repetition in the plans of the actual results and tendencies of the preceding planning period.

As has been shown in [4], the coefficient of correlation between the unshifted series of relative planning and actual increases is in and of itself, without comparison with the coefficient of correlation between the shifted series, a good characteristic of the quality of planning. With it one can evaluate the measure of influence of the plan on the actual production results. A small amount of this coefficient means that the plans are not performing their controlling function.

In this case, as is almost always the case in applied statistical research, there arises the difficult problem of what value of the coefficient of correlation should be considered small. This question can be resolved with satisfactory justification essentially only when the considered statistical set is a selection from a normally distributed random amount. The distribution of economic data rarely can be taken for normal with sufficient reliability. Strictly speaking, regardless of the distribution of these data,

one can speak only about a great spread: usually they are not statistically homogeneous.

In our concrete investigation one more problem arises: what can be said about the quality of planning if the coefficient of correlation is statistically reliably great?

Both of the aforementioned problems can be resolved reliably enough if the calculation of the coefficient of correlation is augmented by a construction on the graph of a set of points which have as coordinates concrete values of relative increases that correspond to one another--planned (P) and actual (A) (Fig. 2).

When the quality of planning is high the constructed points should be extended along a line bisecting the first coordinate angle. Indeed, this happens if in the majority of cases the actual relative increases are close to those planned. In this the coefficient of correlation will be great. But it can also be great when the points on the graph form a random cloudlike figure, on the average far from the bisecting line, and one or two points of it are greatly removed (Fig. 3).

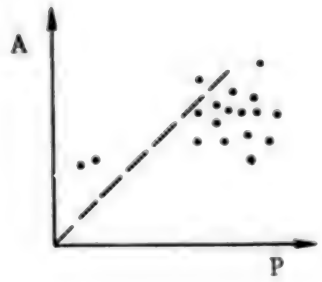
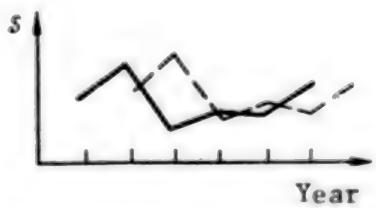


Fig. 3



Conventional symbols:

———— actual amount

- - - - - - - - - - - - planned amount

Fig. 4

And so a combination of the procedure for calculating the coefficient of correlation with an analysis of the constructed sets of points weakens the dependency of the method on the substantiation of the kind of distribution of the initial data and increases the number of cases--including those with a great coefficient of correlation--in which it is possible to draw a particular conclusion about the quality of planning.

The utilization of the concept of the structural shift provides great possibilities of analyzing the quality of planning work. Various authors have

suggested a whole number of formulas for measuring structural shifts. Practically all of them are suitable for our purposes. In order to be specific we shall use the formula

$$S = \sum_{i=1}^{n} \left| \frac{a_i}{\sum_{i=1}^{n} a_i} - \frac{b_i}{\sum_{i=1}^{n} b_i} \right|,$$

where $a_1, \ldots, a_n$ and $b_1, \ldots, b_n$ compared structures[4] n number of elements in structure, and S--the amount of the structural shift.

A correct selection of one structure or another frequently turns out to be a central aspect in planning work. It is important, for example, to effectively distribute capital investments among the branches, the assignment for producing particular products, which has been given to the ministry, among its enterprises, and so forth.

The desired structure can be achieved only by means of changing the already existing ones. Consequently, the actual and planned structural shifts, and especially the ratios between them, can provide essential information about the quality of planning decisions that are made.

Let us consider a homogeneous totality of economic objects, for example, enterprises of one ministry, economic regions of a country, and so forth. Let us take some planned economic indicator which characterizes their development or condition, for example, the volume of output of a particular product by an enterprise, the amount of residential space introduced in the region during a year, and so forth. Let us calculate the actual and planned structural shifts which are determined by the selected objects and the indicator and which take place when moving to one fixed year from the preceding one. We shall construct a graph of both amounts for a series of years on one piece of graph paper, on which one axis is marked off with the years, and the other--the values of the structural shift (Fig. 4).

Experimental calculations show that there are possible cases in which the configurations of the two constructed graphs practically coincide, if the one that corresponds to the planned shift is transferred on to the one for a year ago. These cases correspond to an extremely low level of planning. Indeed, the planned structural shift more or less repeats the actual shift with a year's delay. It is difficult to say that said planning work fulfills the task with expedient improvement of the structural characteristics of the business in a deliberately selected direction.

As in the model considered previously, a purely visual study of the graphs turns out to be sufficient only in simple cases (when the configurations of the graphs are very similar to one another). In more complex cases it is necessary to have a quantitative evaluation of the degree of proximity of the

dynamics of the planning and actual structural shifts. Let us measure this again using the coefficient of correlation.

We calculate the coefficient of correlation between the series of actual and the series of planned structural shifts, and also the series of actual and the series of planned values that have been moved up from a year ago. We compare them with one another. A greater value of the former positively characterizes the planning work for the period represented by the series. A reverse ratio between them shows poor quality of the planning decisions.

As in the preceding model, when studying the structural shifts it would be interesting to find a method of absolute (and not just comparative) evaluation of the proximity of the actual structural shift to the planned one. In principle it would be possible to repeat all stages of modeling that were done above. The only difficulty would be in norming the studied amounts. For individual indicators the norms are naturally set by changing over to relative increases (which we also did). In the case of structural shifts a formal repetition of the same calculations is difficult to interpret in terms of economic content.

Another model of the analysis of the quality of plans is based on the following considerations. In the economic development of a given region it is possible to single out two constituent parts: the first--inertia, predetermined by planning decisions of past periods and by the process of their implementation; and second--realizing new tendencies which lie in the plans for the time interval under consideration and methods of monitoring their fulfillment.

The constituent of inertia can be determined fairly precisely using prognoses, efficient methods of which are considered below. Let us compare the predicted, planned and actual volumes of some indicator for one and the same year. Two variants are possible: either the planned value turns out to be less than the actual or the predicted one does. In each individual case an explanation of the realization of one variant or another is extremely complicated and labor-intensive. But it is obvious when the given planning agency is working well, with large masses of the corresponding data the former variant should prevail. Indeed, a high-quality planning decision not only takes into account existing tendencies, but also envisions changes that are coordinated with the goals of development and achieve them. In a certain relatively small number of cases the plans of a planning agency that is working well can differ greatly from the actual results. This can be brought about both by positive phenomena (which were discussed above) and by negative ones (for example, natural disasters). The planning agency cannot be blamed for the fact that phenomena such as these were not envisioned in the plans. But in the majority of cases the actual results turn out to be closer to those predicted than those planned, and this cannot be explained by random occurrences and, consequently, the planning agency either is not fully taking into account the existing tendencies, or is not correlating the envisioned deviations from the tendencies with the possibilities of realizing them.

Calculations using a large amount of statistical material have shown that the proposed method can be used to reliably separate planning agencies that are operating well from those that are making inadequate planning decisions.

Let us now describe the prognosis block of the model proposed above. In terms of the point of the task it should in one way or another smooth out the dynamic series of the values of the predicted indicator for the years preceding the one under consideration. Usually the main problem here is the selection of the kind of smoothing curve. In an economic context this problem is far from being as simple as it seems.[5]

The fact that the kind of curve is not known beforehand forces the economist to find it by relying on values of the same dynamic series he will then have to use to calculate the parameters of the curve that is found. Such a system can hardly be convincingly justified and has already been criticized in scholarly literature (see, for example, [5], p 196).

When solving the problem of short-term prognostication which interests us, these difficulties can be reduced to a considerable degree. The following method is proposed for this.

Let us smooth out the existing dynamic series (not including the last point, which we shall retain for a "study" of the method) with several functions that are usually applied for this (logarithms, multinomials of a low degree, and so forth). We shall select from these two which produce the best approximations of the value of the last point--one with a shortage and the other with a surplus. Let us take the linear combination of the selected functions that passes through the last point of the dynamic series. After this we shall use the previously selected two functions to smooth out the given series with the joined last point and the projected first point. The linear combination of the functions that are obtained with the coefficients calculated above shall be used as a prognosis for the next year.

Numerous calculations have shown that the proposed method of short-term prognostication produces good results. The selection of two functions instead of one nullifies to a certain degree the error which is involved with such a selection. A "study" of the method using the last point of the existing dynamic series smooths out even more the effect of the peculiarities of the selected functions on the prognosis.

From the experiments that have been conducted it also follows that it is efficient to construct the prognosis on the basis of a 3-5-year dynamic series of annual values of the indicator being studied. In most cases increasing the base to 6-8 years does not appreciably improve the prognosis. A further lengthening of the series usually reduces the precision of the prediction.

Using the described prognosis block it is possible to enrich the model for evaluating the influence of plans given above with the actual results of production. To do this we calculate the coefficient of the correlation between the series of relative actual increases and the series of relative predicted and planned increases. If the first coefficient turns out to be greater, a low evaluation must be given to the quality of the planning work.

In fact in this case the actual results turn out to be more closely linked to the mechanically continued tendencies than to the deliberately earmarked development.

Here, as in an analogous place above, it is useful to construct on graph paper a multitude of points: in one case with the coordinates--planning and actual relative increases, and in the second--predicted and actual. By comparing the configurations of the sets that are constructed and the proximity of the points comprising them to the line bisecting the first coordinate angle, one can obtain additional information about the quality of the planning work of the corresponding planning agency.

The models proposed above are a good instrument which makes it possible to reliably reveal two kinds of factors which lead to planning decisions that are not of a high enough quality. The first factor is imperfect accounting or existing tendencies of development in the plans, and the second is a lack of a sufficiently thought-out system of levers that is capable of realizing the planning decisions that are made.

The application of models using extensive statistical materials shows that many erroneous planning decisions are brought about by these two factors. Moreover, as a rule, for the planning agency that is not operating at a high enough level, both of these shortcomings are typical. Hence it follows that to eliminate them would be an important factor in improving planning. From the model calculations there also follow certain considerations relative to how this could be achieved.

The utilization of prognoses in planning should not be reduced to a mechanical shifting to the future of all existing tendencies. Accounting for the results of prognostication should serve to increase the degree of successiveness in planning. Many of the tendencies that are observed are the result of implementing previously adopted planning decisions. Either these tendencies should be continued and developed or they should be eliminated, once it has been proved that mistakes have been made during preceding planning periods.

If the discovered tendency is unsatisfactory, in order to change it all one need do is give the desired values to the corresponding indicators in the plan. At the same time it is necessary to indicate the system of measures capable of implementing the decision that has been made. This undoubtedly complicates planning procedures, but it also increases the responsibility of planners for the quality of the plans that are developed and makes the latter more realistic and substantiated.

The model presented above for evaluating the influence of the plan on the actual results of production can help considerably in the formation of an effective system of measures directed toward implementing planning decisions. Various measures of the system, and sometimes even the entire system, of course, have previously accompanied work for the fulfillment of the plan. With the help of the indicated model it is possible to evaluate how effectively they have influenced the results that have actually been achieved.

In our opinion, extensive application of models for analyzing the quality of planning will make it possible to accumulate valuable experience, to reveal patterns in the appearance of mistakes, and to localize the sources of their appearance. This will undoubtedly be very important for further improvement of planning work.

FOOTNOTES

1. By plan we mean that variant of it which is approved before the beginning of the planning period (unadjusted plan).

2. In our context this stage is very short--only 1 year.

3. Of course, increases can be negative, for example, when removing outdated products from production, reconstructing a plant and so forth.

4. It is assumed that all the amounts are measured in the same units.

5. The idea of smoothing out originated in classical mechanics. But, as distinct from economics, there the kind of the curve was known beforehand because of theoretical considerations which did not depend on the concrete values of the series being smoothed out. A clear example of smoothing out in mechanics (and, apparently, the first in history) was the calculation by Gauss of the orbit of the planet of Ceres using just a couple of observations he had at his disposal. In this case the kind of curve was determined by Kepler's laws.

BIBLIOGRAPHY

1. Kossov, V. V., "On Rates in the Development of the Socialist Society," EKONOMIKA I MAT. METODY, 1980, Vol XVI, Issue 1.

2. Perminov, S. B., "Imitatsionnoye modelirovaniye protsessov upravleniya v ekonomike" [Imitation Modeling of Processes of Management in the Economy], Novosibirsk: Nauka, 1981.

3. Perminov, S. B., "Evaluation of the Quality of the Plan Using Machine Imitation of the Process of Its Implementation," EKONOMIKA I MAT. METODY, 1983, Vol XIX, Issue 5.

4. Medvedev, P. A., "Ekonomiko-matematicheskiye metody v prikladnykh issledovaniyakh i khozyaystvennyy mekhanizm" [Economic-Mathematical Methods in Applied Research and the Economic Mechanism], Moscow: Izd-vo MGU, 1982.

5. Anchishkin, A. I., "Prognozirovaniye rosta sotsialisticheskoy ekonomiki" [Prediction of the Growth of the Socialist Economy], Moscow, Ekonomika, 1973.

11772
CSO: 1820/245

CENTRAL ASIAN DEVELOPMENT PROBLEMS HIGHLIGHTED

Moscow PLANOVOYE KHOZYASTVO in Russian No 7, Jul 85 pp 122-123

[Article by G. Kopanev, doctor of economic sciences, and P. Volodin, honored economist of the UzSSR: "Problems of Socio-economic Development in the Central Asian Republics"]

[Text] A regularly scheduled meeting of the Central Asian Commission of the Scientific Council of the USSR Academy of Sciences on the problem "Distribution of the productive forces of the USSR" took place in the city of Dushanbe in January 1985. In his introductory remarks the Chairman of the TaSSR Council of Ministers K. M. Makhkamov especially stressed the importance of the solution for the Central Asian region of the task of the rational utilization of labor resources and their employment in social production.

Academician V. P. Mozhin of VASKhNIL [All-Union Academy of Agricultural Sciences imeni V. I. Lenin, chairman of the Council for the Study of Productive Forces under USSR Gosplan devoted his talk to the more important regional problems of the country's socio-economic development over the long term. He addressed, in particular, questions dealing with the utilization of Siberia's and Kazakhstan's power production potential and Central Asia's and Azerbaijan's labor resources, the elimination of inefficient shipping, the concentration of production in large cities, and integrated use of natural resources, etc. The speaker noted that in the future the reproduction structure (vosproizvodstvennaya struktura) of capital investments would change: an ever greater portion of it would be directed to reconstruction, and, consequently, the possibilities of new construction influencing the distribution of productive forces would diminish. Better utilization of already established potential and the economy and efficient utilization of resources must become the main thrust in their development. The highest rates of productive force development and the construction of new projects in the light and food industries and other labor-intensive sectors of the economy will be provided for in union republics with high levels of growth in labor resources (Central Asia, Azerbaijan, Kazakhstan and Moldavia). In this connection, it is necessary to pay more attention to the training of cadres of skilled workers in these republics. In the European sections of the country power conservation and retooling of existing enterprises must receive special attention.

M. B. Babayev, chairman of TaSSR Gosplan and deputy chairman of the TaSSR Council of Ministers, in discussing his republic's economic problems, highlighted the need to ensure the efficient utilization of labor resources in social production (with the appropriate training of worker cadres and specialists) and the improvement of economic proportions, the distribution of productive forces and the territorial organization of production.

It would be advisable to create a rolled stock production unit at the Tadzhik Aluminum Plant, a considerable portion of whose output can be consumed locally. The favorable natural and climatic conditions of southern Tadzhikistan and mountain foothill areas should be exploited more for the development of a fruit and vegetable growing complex. This would make it possible to attract more of the able bodied population into agricultural production.

In his report, V. G. Kostakov, doctor of economic sciences and deputy director of the Scientific Research Economics Institute attached to Gosplan, analyzed ways to improve the utilization of the Central Asian republics' labor potential in social production. He stressed that, despite the currently expanding opportunities for the growth of labor productivity, its rate of growth remained unsatisfactory. In Central Asia and the Transcaucasus the number of people employed in industry and construction will be increased while there is a simultaneous decrease in agricultural workers.

Academician S. K. Ziyadullayev, chairman of the Council for the Study of Productive Forces of the UzSSR Academy of Sciences, noted that the development of industry, especially its labor intensive segments, should be accelerated in the Central Asian region. It is necessary to direct more attention to improving Central Asia's fuel and power generating system by using natural gas, coal and hydro-electric power resources better. The problem of preserving the Aral Sea requires resolution. In the field of agriculture the production of fine-fibered varieties of cotton should be stressed, as should the creation here of a large textile center.

The director of the Scientific Research Institute for Economics and Mathematical Economic Methods of Planning of the KiSSR Gosplan, A. D. Termechikov, dwelt on the main trends in the development of productive forces in the KiSSR. About 65 percent of all capital investment over the long term will be in the reconstruction of existing enterprises. The intention is to create new jobs primarily in small- and medium-sized cities. Expansion of the republic's primary water resources, further development of the Issyk-Kul Territorial Production Complex and development of a resort-recreation zone also are urgent problems for the development of the KiSSR.

D. B. Bayramov, director of the Scientific Research Economics Institute and the Computer Center of the TuSSR Gosplan, dealt with questions of the economic development of the TuSSR, which encompasses a large area with a low population density. This situation makes development of natural resources difficult. He also raised questions about establishing a gas-petrochemical complex in the republic, improving the efficiency of the irrigation system and utilizing solar energy for economic purposes.

Academician R. Yu. Kuvatov of the KaSSR VASKhNIL characterized the production and resource potential of southern Kazakhstan, paying special attention to the problem of water availability in the region, in particular to the regularization of the inter-republican use of the water resources of the Amu-Darya and Syr-Darya rivers. Candidate of economic sciences A. A. Bostanzhoglo, department head of the Institute of Water Problems of the USSR Academy of Sciences devoted his presentation to the economic use of water resources in the region. Candidate of economic sciences G. A. Zakharov, a staff member of the Permanent Commission for the Study of the Natural Productive Forces of the USSR attached to the Presidium of the USSR Academy of Sciences, directed his attention to the coordination of the Comprehensive Program for Scientific and Technical Progress with the development of general, sectorial and territorial plans (skhenia) for the development and distribution of productive forces. Doctor of economic sciences G. V. Kopanev, department head of the Council for the Study of Productive Forces under USSR Gosplan, spoke about the main trends in the economic and social development of the Central Asian region. A. F. Kondrat'yev and O. A. Leont'yev, representatives of USSR Giprovodkhoz [All-Union State Planning-Surveying and Scientific Research Institute for Water Management Construction; provided information on the plan (proyekt) to redivert part of the flow of Siberian rivers to Kazakhstan and Central Asia.

At a meeting of directors of scientific research organizations of Central Asia and Kazakhstan held at the conclusion of the Central Asian Commission's work the need was noted of improving methodology development in connection with the drawing-up of a general, sectorial and territorial plans for the development and distribution of productive forces over the long term.

8750/12955
CSO: 1820/253

ESTONIAN GOSPLAN CHAIRMAN REVIEWS ECONOMIC GOALS

Tallinn KOMMUNIST ESTONII in Russian No 8, Aug 85 pp 38-45

[Article by G. Tynspoyeg, deputy chairman of the ESSR Council of Ministers, chairman of republic Gosplan: "At the Junction of Two Five-Year Plans"]

[Text] It was emphasized at the conference at the CPSU Central Committee on questions of acceleration of scientific and technical progress that the transition of the economy to the path of intensive development requires a thorough reorganization of planning and management and of the entire economic mechanism. It is necessary to make the economy maximally susceptible to scientific and technical progress and to ensure a vital interest in this by all parts of the national economy. A leading place in plans should be occupied by qualitative indicators reflecting effectiveness in the use of resources, the scale of production renewal and growth of labor productivity on the basis of scientific and technical progress.

The main thing in reorganizing management of the economy is the fullest, all-round employment of the advantages of the socialist economy. Certain steps have already been taken during the present five-year plan. Measures were adopted in our republic for improving planning and contributing to the bettering of end economic results. In accordance with the decree of the CPSU Central Committee and the USSR Council of Ministers "On Improving Planning and Intensifying the Effect of the Economic Mechanism on Raising Efficiency of Production and Quality of Work," the importance of state long-term planning was appreciably boosted. The role of local organs in planning of economic and social development of regions has grown. The system of plan indicators is being improved, and planning is being carried out more painstakingly and purposefully, particularly in development of the service sphere, production of consumer goods and use of physical resources and secondary materials. In recent years the role of the balance method in planning has grown. It, like putting the system of technical and economically correct norms into operation, provides greater balance and validity for plans. Long-term norms and standards for distribution of profit, formation of wage and material incentive funds, expenditures of materials and operation of equipment have begun to be widely used. Planning of training and use of manpower for sectors of the economy have been improved.

An important direction of improvement of planning work and bringing it closer to practical needs is the use of program planning. The development and realization of social programs make it possible in sectors of the economy and at their meeting points to more effectively eliminate lack of coordination and to resolve speicific intersectorial and regional problems. For example, such objects are served by the food program of Estonian SSR for the period to 1990 and also republic special-goal complex programs of use of natural resources and conservation of the environment in northwestern Estonia, development of the city of Tallinn, raising of labor productivity in industry and construction and so on. We have developed a total of 14 economic, social and regional as well as 10 scientific and technical programs which at the present time are being systematically carried out.

Planning organs increasingly resort to the aid of scientists and specialists from scientific-research and other institutions. They employ their recommendations and proposals in the solution of concrete problem and working out of drafts of state plans. One may cite as an example the preparation of a plan of social and economic development of Prichud'ye [Chud region (?)] for the 12th Five-Year Plan.

At the present time, a crucial time has arrived in the work of planning organs: plans are being compiled of economic and social development for the new five-year period and at the same time the developmental tendencies of the economy in recent years are being thoroughly studied. The results of the present five-year plan are being analyzed and additional measures are being designated for ensuring the unconditional fulfillment of this year's plan.

A certain idea of the development of the republic's economy and fulfillment of the targets of the 11th Five-Year Plan is provided by Table 1. Since several months still remain to the end of the five-year plan, final results may deviate somewhat from the indicators presented in the table.

Table 1

	Growth according to 11th Five-Year Plan (in percent)	Anticipated actual growth for 1981-1985 (in percent)
National income	15.3	18.8
Volume of industrial production	13.0	13.9
Gross agricultural production	12.0	10.0
Public labor productivity	15.0	17.0
Retail goods turnover	16.0	13.0
Volume of personal services	30.0	30.5
Monetary income of population	19.3	21.0
Per-capita public consumption funds	20.1	20.3
Real income of population	12.0	11.2

Judging on the basis of preliminary results, the present five-year plan can be considered successful. Most sectors of the economy are successfully fulfilling the tasks set for them. Because of unfavorable weather conditions in the first years of the five-year plan, the growth rate of agricultural production lags somewhat behind the planned rate, which in its turn has a negative effect on retail trade turnover and on the real income of the population. More rational use is being assured of physical, financial and labor resources. On the average, a larger end result was secured per unit of resources than in the previous 5 years and this naturally is reflected in the indicators of efficiency of public production. The economy's material and technical base is being strengthened and modernized, qualifications and occupational skill of personnel are being raised, and the people's well-being is being improved.

Many factors have contributed to the achievements. First, favorable conditions for development of industry and in recent years of agriculture as well and also smoother functioning of intersectorial and interrepublic relationships, in other words, improvement of material and technical supply. Second, measures of intensification of production and improvement of the economic meachanism adopted at enterprises and organizations and launching of socialist competition among labor collectives. Third, strengthening of organization, labor and production discipline and increased demands on executive personnel.

The economic potential, development of productive forces and the scale of accumulation and consumption characterize in a most general way the national wealth (totality of physical assets accumulated by society) and the dynamics of its growth. In the last 8 years, this indicator increased 1.5-fold in the republic. The worth of durable goods (motor vehicles, refrigerators, television sets and so forth) grew 1.4-fold in this time.

For the attainment of high end results on the scale of the republic's entire economy, rapid development of individual sectors of production is inadequate. It is essential to ensure the proportional growth of all sectors of the economy, to effectively solve intersectorial problems and to overcome the developmental difficulties of the economy as a single whole (for example, reduction of transport intensiveness, rational utilization of the work force and so forth).

For the expiring 5-year period, the country's national economy was given a qualitatively new task: to provide for its further development on the basis of intensification and raising of the efficiency of public production. It can be said that this task has basically been fulfilled in the republic. The lion's share of manpower's growth in recent years has found application in trade and the nonproduction sphere, incidentally primariy due to intensification of physical production. Last year, for example, 96 percent of national-income growth came from increased labor productivity. Inasmuch as influx of manpower in the national economy is being rapidly reduced (in the 10th Five-Year Plan, the number of workers grew 6 percent, but in the last 4 years only 2.6 percent), intensification of production appears to be the only

possibility of providing manpower for the nonproduction sphere, first of all for new facilities for health care, education, housing and municipal services and personal services.

At the same time, growth rate of labor productivity for the national economy as a whole is not at all satisfactory. Compared to the balance of the work force compiled at the beginning of the five-year plan, the sphere of physical production still attracts in some years quite a great deal of manpower resources. For example, in industry, agriculture, construction and other sectors of physical production, almost half of the entire influx of manpower into the national economy became operative, which is significantly more than planned.

In 4 years, only a few ministries and departments, for example, light and food industry, construction-materials industry, forestry and the Administration of the Fish Industry, by attaining an increase in production with a reduction in the number of workers, were able to fulfill the the set task--to provide production facilities with manpower through its redistribution within the limits of the given system, that is, solely through the means of intensification of production.

In a number of sectors of the economy, labor productivity is growing extremely slowly compared to targets planned in the beginning of the five-year plan for intensification of production. But it is namely growth rate of labor productivity that characterizes more graphically than anything else the contribution of this or that sector of the economy to the production of national income.

An important source of raising production efficiency is economy of material resources and reduction of material intensiveness of production. With the beginning of the present five-year plan, material outlays in the republic's economy were reduced by an average of 1.3 kopecks per ruble of production. Because of this, in four years raw and other materials and fuel were economized in the amount of 122.5 million rubles. In other words, economy of material resources make it possible to increase the national income each year by 31 million rubles, which constitutes about 24 percent of national income's annual growth.

Table 2 presents data for sectors of the economy on materials intensiveness of production in kopecks per ruble of production (in 1973 comparable figures).

Table 2

	1981	1984
Total for economy:	60.2	58.9
industry	66.7	65.6
agriculture	68.5	68.5
construction	52.6	52.0

transport and communications	44.2	44.6
other sectors	17.6	18.7

The retention of former materials intensiveness in agriculture and its growth in transport, communications, trade and several other sectors are due, on the one hand, to an increase in the costs of development of their material and technical base and, on the other, by the fact that in agriculture, in public motor transport and in trade targets specified in the five-year plan for increase of production remained unfulfilled, which retarded the growth rate of the considered efficiency indicator.

Here it would be appropriate to emphasize once again the tremendous importance of the thrift factor in intensification of the economy. The scale of the economy is expanding from year to year. At the same time, each kopeck saved per ruble of production is becoming increasingly more significant. In addition to reduction of the relative expenditure of materials, power, fuel and other resources, it is important to also economize worktime. Results here largely depend on the ability to combine collective and personal interests and to induce people to utilize as rationally as possible each work day, hour and even minute.

The production potential of the economy and its sectors is characterized by average daily production volume. The growth of this indicator and consequently of the approximate "weight" of each additionally worked or lost day from the point of view of the economy's development is shown in Table 3, which presents data on the average daily volume of production in the republic for a calendar day.

Table 3

	1980	Anticipated in 1985	Growth in percent
Social aggregate product (millions of rubles)	22.1	25.3	14.5
National income (millions of rubles)	8.8	10.5	19.3
Industrial production (millions of rubles)	14.3	16.5	14.0
Meat production in agriculture (in dressed weight, tons)	537	596	11.0
Milk production in agriculture (tons)	3,196	3,411	6.7
Volume of personal services (thousands of rubles)	185	241	30.3

A significant indicator of production efficiency is yield on capital by which it is possible to judge the intensiveness of use of fixed capital. For the economy as a whole and for its most important sectors, this indicator for the present five-year plan has unfortunately grown smaller. This is especially

true of agriculture and construction, where the stock of fixed capital (the capital-labor ratio) has grown faster than in other sectors of physical production. Reduction in yield on capital is due to a certain degree to the startup of new production capacities and their higher cost. But at the same time, this frequently indicates incomplete use of these capacities and unsatisfactory employment of fixed capital, although we know that their fullest possible load serves as the chief precondition of intensification of the economy.

At the April (1985) Plenum of the CPSU Central Committee, it was emphasized that cardinal acceleration of scientific and technical progress is assuming the foreground as the main strategic level of intensification of the national economy and better employment of accumulated potential. Moreover, it was pointed that in the majority of sectors scientific and technical progress is proceeding sluggishly, primarily through improvement of existing technology and partial modernization of machines and equipment. At the same time, a transition is necessary to basically new technological systems offering the highest efficiency. A task of paramount importance in the 12th Five-Year Plan will be a sharp increase in the coefficient of equipment renewal, which of late discloses a tendency toward diminution, attesting to the obsolescence of the production apparatus.

All sectorial ministries and departments of our republic need to seriously work along this direction. Systematic renewal of fixed capital is so far being achieved only by light-industry enterprises whose degree of fixed-capital wear at the beginning of 1985 amounted to 35.9 percent versus 46.1-percent average for the republic's industry. In the construction materials industry, wear has exceeded 52 percent, which is to a large degree explains the numerous breakdowns and downtime in the sector.

The equipment park in industry continues to before as before, although old equipment should be more rapidly replaced in the interest of speeding up growth of labor productivity and improvement of quality of work and production. For example, in 1983 only 37.1 percent of the new equipment installed in industry (in physical units) went to replace obsolete equipment, while at enterprises of local industry, the figure was even smaller--5.7 percent.

The tendency of so-called extensive technical development in our industry is even intensifying. In 1975, the cost of liquidated active production fixed capital amounted to 32.9 percent of the cost of newly introduced fixed capital while for 1981-1984 it was 27.4 percent on the average. As a result, the share of new fixed capital aiming at the creation of additional production capacities is growing, the equipment park is becoming older and the extent of its wear is increasing.

In the interest of intensification of management it will be necessary to engage energetically in the coming 5-year period in acceleration of technical progress in production and wide-scale renewal and modernization of equipment.

The chief goal of the party's economic policy is to ensure further growth of the well-being of the Soviet people on the basis of stable progressive

development of the country's national economy. The state plan provides concrete measures for attaining this goal: uninterrupted growth of physical production and improvement of the material and technical base in all sectors of the national economy and economic regions. With further development of production, conditions of work and everyday life on which the well-being of workers depends are improving at tens of enterprises--for a significant portion of their personal balance of time goes into worktime.

In accordance with the state plan, the present five-year plan employs many other measures for improving the people's well-being. For example, preference is given in industry to production of consumer goods, production and procurement of agicultural products are being increased, the development of personal services is being accelerated, more facilities of the social infrastructure are being built and so on.

In the past 4 years of the five-year plan, the production of goods of mass demand grew at an advancing rate compared to the total volume of manufactured production (growth was respectively 13.5 and 11.3 percent). But nonetheless we did not succeed in providing a full goods supply for the monetary resources of buyers. This means that it will be necessary in forthcoming years to develop even more quickly production of consumer goods while improving at the same time their structure and putting out more marketable items.

On the whole, construction of housing and educational facilities is proceeding satisfactorily: according to preliminary forecasts, the five-year plan of turnover and operation of housing space and pupils' places in general educational schools will be slightly overfulfilled. The material base of vocational and technical education is being strengthened rather quickly. But the rate of construction of medical institutions is not satisfactory and the hospital places turned over are below planned. It follows from this that although the construction of medical institutions has been paid more attention in recent years, we need to more strictly demand their timely going into use.

Deficiencies also exist in the construction of trade and personal-services enterprises, and municipal-service facilities are slow in being erected. Development of the telephone system is in need of acceleration. In the course of the 5 years, new automatic telephone stations for 45,000 subscribers in cities and 22,000 sbuscribers in rural localities will go into operation (in 1980, we had an average of 19.8 telephones per hundred city residents and 12 telephones per hundred rural residents; by the end of the five-year plan these indicators will be respectively 22.5 and 14.8). Still the present state of telephone communication far from satisfies all requirements.

Housing construction is growing rapidly in the countryside, and individual and cooperative construction is developing. During this five-year plan, contracting organizations were given for the first time state-plan targets for construction of individual houses. Due to the opening of new stores and additional deliveries of goods, more construction materials are being sold to the population. However, it should be critically noted that individual and cooperative housing construction could develp even more rapidly if ispolkoms of local soviets and other organs better organized this work and solved more effectively arising problems.

Cooperative housing should also begin to be built in small towns, villages and rural localities where incidentally cooperative members also could participate in the construction of small dwelling houses. There would then be less of a demand for the efforts of state construction organizations. But this, of course, presupposes that Gosstroy develops and advertises plans of small dwelling houses (with two-four apartments).

Another serious problem arises in connection with individual and cooperative housing construction. The population of our republic now spends only 2.4 percent of its monetary income on construction of houses or accommodations and on acquisition of construction materials. People try to find traditional ways of material use of their money through purchases of needed commodities. Incomes are growing rapidly, and their commodity provision requires increasingly greater efforts by the economy. For this reason, together with the development of production of consumer goods, it is necessary to reorganize the structure of the people's personal expenditures, which presupposes a wide-scale and carefully thought out propagandization of change of consumption stereotypes and the forming of new ideas and orientations.

Construction services must here perform their role. An appropriate decree of the CPSU Central Committee and the USSR Council of Ministers makes it incumbent to increase aid to the population in the repair and construction of housing structures for gardening associations and of other structures.

For the purpose of describing the development of the social infrastructure in the republic during the 11th Five-Year Plan, let us compare certain 1980 and 1985 data:

--housing increased almost 14.5 percent;

--the number of places in preschool children's institutions will increase roughly 14.3 percent;

--the provision of places in preschool children's associations will increase in cities from 77.2 to 79.3 percent and in rural localities from 40 to 50 percent;

--the number of pupil places in general educational schools will grow almost 12.5 percent.

--the share of persons studying in the second shift in general educational schools (day form of instruction) will increase approximately 47.5 percent, including 55.8 percent in secondary vocational and technical schools.

A number of union ministries and enterprises in our republic are participating in economic experiments whose aim is to find additional means of raising efficiency of production and the whole economy. As of this year, 11 enterprises of union affiliation and also organizations of the ministries of light, food industry and personal services have become involved in the experiment. The task is to increase production volume, to strengthen delivery discipline, to raise quality of products and standards of services and to more

fully satisfy the needs of the population. For enterprises and departments participating in the experiment, the number of planned indicators has been reduced. At the same time, accountability of labor collectives has been increased for developing plan indicators and end results of labor. The increase in the role of labor collectives and determination of perpsectives of development and solution of economic questions of enterprises is bound to contribute to intensification of production.

In the course of the experiments, innovations, which have been approved and have already proved themselves in one or another sector of the economy, are being widely used. Recommendations and proposals of scientists and practical workers, whose effectiveness will be revealed only in the process of the experiment are being verified experimentally in practice. For example, at enterprises of light industry, payment of additional remunerationis permitted to engineering and technical personnel in an amount up to half of one's salary and for workers up to 13 percent of the wage rate if the work is performed with a fewer number of people.

The system of price formation is being improved and will become more effective: markups to prices of stylish and high-quality items will be used, while non-moving goods will be reduced in price in agreement with the Ministry of Trade. The financial relations of enterprises participating in the experiment with the state budget are based on long-term stable norms stimulating the search for and use of new reserves of boosting production efficiency by labor collectives. Stable norms are used, for example, in forming material-incentive funds. The norm of deductions from profit going into the state budget is stable, and there are others. Furthermore, for economic insurance and operative requirements of enterprises, the financial-reserve fund is created from their above-plan profits and a similar fund of the ministry is created from markups to prices for new goods of improved quality. For stimulating exports, 80 percent of currency receipts from the sale of above-plan export products remain at the disposal of the ministry. In the organization of the Ministry of Light Industry, a production and social development fund is being created. It will be used for the financing both of construction of new capacities and the modernization of existing ones as well as for the development of the social infrastructure. For the purpose of speeding up technical progress, the ministry intends to create its own planning and construction organization.

Marked changes will also take place in other sectors of the economy involved in the experiment. The volume of consumer services in this five-year plan should grow by one-third, while the number of persons employed in the sectors will increase by less than 3 percent. For this reason, in the development of the experiment's principles, special attention was paid to rational use of manpower. The brigade form of labor is being introduced on a wider scale. In addition, engineering and technical personnel are being included in brigades. The labor contribution of each member of the collective is taken into account with scrupulous accuracy, and the earnings are distributed on its basis.

Last year's results, as in the first half of the present half, show that in the sectors and at the enterprises included in the experiment, production is developing somewhat faster than in other systems. New methods of control and

management that have proved themselves in the course of the experiment need to be used in all sectors of production in the following five-year plan. As was pointed out at the conference at the CPSU Central Committee on questions of acceleration of scientific and technical progress, it is necessary to go on from the economic experiment to the creation of an integral system of management and control.

In recent years, the foreign-economic ties of our republic have been significantly expanded. About 90 Estonian enterprises export products to more than 100 foreign countries. Many of our products--excavators, electric motors, electrical equipment, products of shale chemistry, furniture, skis, chipboard, products of light and food industry and toys--are in demand in many states. Within the framework of foreign economic relations, scientific and technical cooperation has been expanding from year to year and many contacts have been established with CEMA member-countries. On the part of our republic, there participate first of all collectives of academic institutes, VUZ's and scientific-research institutions of the Ministry of Health. Acceleration of development of production is promoted by the acquisition of licenses and the introduction of modern technologies on their basis. For example, last year production of the highly efficient Pinoteks composition for treatment of wooden structures was introduced at Rapla Interkolkhoz Construction Organization on the basis of a license.

The relatively rapid development of foreign trade in recent years is contributing to the technical renewal of production and enriches the selection of consumer and food goods offered to the population. As a result, the development of foreign economic relationships is one of the factors of growth of production efficiency and well-being of the people.

The plan of basic directions of economic and social development of the Estonian SSR for the forthcoming 5-year period has already been prepared. Ministries, departments, party raykoms and rayispolkoms, union enterprises and scientific institutions took part in working it out. We were guided in the determination of the basic directions by the results of our country's economic and social development, decisions of recent plenums of the CPSU Central Committee on intensification of the national economy, intensification of the regime of economy and further rise of the people's well-being. The economy faces the task of speeding up growth of national income and physical production, correlating more closely the construction program with resources and production capacities and ensuring the primary development of production of consumer goods and the service sphere in regard to physical production. In the development of plans for the 12th Five-Year Plan, there were also taken into consideration earlier adopted long-range special-goal complex programs such as the food program, development of production of goods of mass demand and the service sphere and so on.

Absolute growth of industrial production has been planned for more than the current five-year plan with an advancing rate of production of consumer goods. Increase in the output of goods of mass demand should also outstrip the growth of the population's monetary income, thanks to which additional possibilities will be created for exchange of goods with other union republics.

Industrial-production volume most grow exclusively through higher labor productivity without an increase in the number of workers. Technical renewal of industry, growth of labor productivity, intensification of the regime of economy and other factors should assure reduction of production materials intensiveness by 0.7-0.8 percent a year and 4-5 percent over 5 years. Machine building, forestry, light and food industry, production of construction materials and industry of republic subordination will develop at an advancing rate.

In planning the development of the agroindustrial complex, the republic's food program was taken as a basis, in conformity with which the volume of production and procurement of meat, milk and crop-growing products was designated. Taking into consideration the specialization of our agriculture in animal husbandry, further development of production of meat and dairy products will be emphasized. Active construction is continuing of storage facilities and roads in the countryside. Other measures have been outlined for the prevention of lasses of agricultural products. A potato processing plant and a complex for the processing of agricultural raw materials in Khaapsaluskiy Rayon, the Rakvereskiy Meat Combine, mixed-feed plants in Vilyandiskiy and Pyarnuskiy rayons and others are under construction.

For the purpose of ensuring proportional economic and social development of the entire republic, the plan of basic directions provides for an increase in the capacitiees of construction organizations. For this end, construction plans both for construction organizations and in a regional context need to be balanced with respect to resources and manpower. Of major importance here is an increase in the production of construction materials and improvement of their quality. Compared to the current five-year plan, the volume of construction of water and municipal-service facilities, public education, culture, trade and personal services will grow. Measures will be adopted for the unconditional fulfillment of plans for construction of social infrastructure facilities.

As in this five-year plan, an advancing growth is planned of national income in relation to an increase in the gross social product. An advance is being achieved in more assiduous and thrifty use of any resources and of the entire production potential. Appropriate measures will be provided in the state plan, but in the development of plans of each rayon and enterprise, it is necessary to keep in mind the reduction of production costs and the rational use of the production potential as an important reserve of acceleration of growth of the national income. The role and value of the economy factor in our plans is characterized by the fact that 16 percent of the national income must come from reduction of materials intensiveness of production.

Drafts of plans for the new five-year plan are now being developed at all enterprises and organizations, that is, a responsible stage has been reached in state planning. Concrete measures should be outlined in each labor collective for the realization of the new directions of the economic policy of the CPSU through the quickest possible transition of the economy to the path of intensive development. For this it will be necessary to determinedly introduce achievements of science and technology and to effectively renew production fixed capital through modernization and reequipment of enterpsies

as well as to efficiently utilize other reserves for boosting of production efficiency. A task of paramount importance is development of production of consumer goods, the service sphere and the entire social infrastructure, improvement of people's working and rest conditions and adoption of other measures providing for improvement of the people's well-being. In the preparation of plan drafts, it is important to keep in mind that the control figures of economic and social development released by ministries and labor collectives constitute minimal tasks for the 12th Five-Year Plan.

The tasks set for us by the party are complex. Their fulfillment will require of each sector of the economy and each labor collective strenuous work and able use of the factors of intensification of the economy. We should find and adopt organizational, economic and social reservers and see to it that each one works at his place conscientiously and with full yield. Only such an attitude towards the work will make it possible to worthily greet the 27th CPSU Congress and to ensure accelerated development of all sectors of the national economy during the new five-year plan.

7697
CSO: 1820/8

PRACTICAL APPLICATION OF ECONOMIC RESEARCH DISCUSSED

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 9, Sep 85 pp 83-89

[Article by I. Suzyy, department chief, UkSSR Gosplan, and B. Panasyuk, subdepartment chief, UkSSR Gosplan, candidate of economic sciences: "Planning the Introduction of the Results of Economic Research"]

[Text] In the implementation of the immediate and long-range tasks of our party's economic policy, an important place belongs to economic science. In the center of its attention are the questions of the further political-economic substantiation of the improvement of the planned management of the national-economic complex, the effectiveness of the branches of the national economy under the conditions of their intensive development, the acceleration of scientific-technical progress and the more aggressive use of its results in production, the natural laws underlying the growth of labor productivity and the payment of labor, the improvement of the quality of output and work, the renovation of production assets, and the economizing of live and embodied labor.

Research on these and many other problems in the Ukraine is being carried out by a number of scientific-research, planning-research, and design organizations in the economic and technical areas of specialization, and by departments in higher educational institutions. During 1981-1983 they completed 2900 projects. Of them, approximately 40 percent are being executed by the scientific-research organizations of ministries and departments of union-republic and republic-level subordination.

Most of the economic developments are of a completed nature and are used in production, and are yielding a considerable economic or social benefit. In 1983 along, the scientific institutions in the republic prepared 53 methodologies and instruction manuals, and 110 norms and standards for production.

The problem of the introduction of the results of scientific and economic research is very complicated. A detrimental effect is exerted upon its resolution first of all by such factors as shortcomings in the planning and accounting of the introduction of the results of economic research into production; the poor quality of the developments, and the existence of small-scale topics; the lack of the proper participation of the ministries and their

subdivisions in the formation of the plans of the scientific institutions and the introduction of the research results into production; and the imperfection of the system of providing incentives for the labor performed by scientific workers.

Individual scientists express the opinion that the development of recommendations and other materials for practical use is not mandatory and, in their opinion, can be only a "by-product" of the political-economic research. It is difficult to agree with this. This point of view cannot promote the overcoming of the tendency to divorce theory from practice, or promote the intensification of the close relationship between theory and life. Research of a political-economic nature must be directed at the theoretical resolution of very important national-economic problems, and must serve as the methodological basis for specific economic sciences, developments, and practical recommendations for production and for the making of administrative decisions. In the final analysis, it is only practice that resolves the question of the correctness of the conclusions of scientific research. It is necessary for the practical recommendations or other normative documents to be brought to the degree of concretization that is sufficient for introduction into production, and that will promote the search for the most effective forms of combining science and production. The establishment of the proper procedure in the planning of the introduction of the results of scientific research will make it possible to achieve the more effective use of the achievements of economic science.

At the present time the plans for the introduction of completed developments are drawn up only in individual ministries and departments, but the scientific institutions have only the data about their customers. In addition, there is a lack of a single statute governing the introduction of economic developments. It is not clear what is to be considered the introduction of them, and what is to be considered their use. This does not conform to the requirements that are confronting the ministries and departments, and the scientific institutions, in improving the introduction of the results of scientific research into production.

When planning the introduction of economic developments at all levels an important factor is the question of what should be included in that plan. It is necessary to have a clear-cut delimitation of the results of the economic research into those that can be used at various levels of administration of the economy or in science itself.

As a result of the research, various documents are prepared. They include methodologies, methodological recommendations, drafts of instruction manuals, state standards, specifications, scientific memoranda and reports, proposals, monographs, etc.

In scientific reports and report memoranda, and in various proposals, as a rule, there is an exposition in brief form of the results of the results of the research that has been carried out; these documents are of an informational nature. Therefore these materials, when coming in from scientific institutions, are used for the making of decisions pertaining to

the general directions of economic development and, naturally, cannot be included in plans for introduction.

By the introduction of the results of scientific research we understand the application in production of materials -- recommendations, methodologies, norms, and standards -- that have been approved by the appropriate economic agency and that are of definite benefit to production.

A question that remains theoretically and practically not completely resolved is the question of the effectiveness of the introduction of completed economic developments. Opinions are expressed -- and not without substantiation -- to the effect that one cannot compute an economic benefit for all the economic developments, unlike the situation that pertains to the projects dealing with the natural sciences.

The methodological foundation of economic science is political economics. Its relationship with the practice of management is carried out, as a rule, by means of other economic sciences. This relationship must be contained in the plans for scientific research and the plans for the introduction of its results, which, in their turn, must be intercoordinated with the plans for the economic and social development of the national economy, as well the individual branches and regions.

Only in this instance will the conditions be created for the complete satisfying of the demands of social production.

The time has come for economic science to occupy, in the planning of introduction, the same place that the natural sciences occupy. It would be desirable to legalize the development of the plans for the introduction of completed research dealing with economic problems on the level of the state five-year plan and the annual plan, as well as the plans for the ministries and departments, associations, and enterprises. This, in our opinion, will considerably increase the responsibility of the scientific institutions for the developments, and the responsibility of the ministries and departments, associations, and enterprises for their introduction into production.

Single planning of the introduction of completed developments also presupposes their corresponding accounting. At the present time the reports of scientific institutions concerning introduction are confirmed, in most instances, by statements containing indications in general features about the fact that the material has been used. But this can pertain to an equal degree to a small report memorandum dealing with a question of secondary importance or to substantial materials that have been introduced at many enterprises. And so it is here that one sees the beginning of various kinds of unclear situations, which lie in the fact that the scientific institutions frequently receive statements that confirm the introduction of completed projects which, practically speaking, have not been introduced anywhere.

At the same time, scientific research which is to be begun and completed developments are accounted for with sufficient completeness. For each topic an accounting card is filled out, and that card is sent by the scientific-research institutions and institutions of higher learning to the VNTItsentr

[All-Union Scientific-Technical Research Center] of GKNT [State Committee for Science and Technology. There the information is processed and is then sent to the republic-level information centers. On the basis of these materials, in UkSSR, for example, a Composite Survey of Completed Developments Pertaining to Economic Problems in UkSSR is published. At the same time, this information, despite the high mechanization of processing it, contributes insufficiently to the acceleration of the forwarding of the results of the scientific research to production. From the moment of the completion of the scientific research until the receipt of the information about it (in the Composite Survey) at the ministries, departments, associations, and enterprises, a year goes by.

But the chief shortcoming of this information is its onesidedness. It illumines only that which was received in the process of the research, but does not contain any data concerning the manner in which the results of the research are being introduced into production or whether they have found any application at all.

This question has also been incompletely resolved by the statistics agencies, which provide an incomplete treatment of the concept of introduction. They sometimes include in introduction the publication, for example, of monographs. What kind of introduction is that? This is a scientific project. It is used for the further development of science itself and provides a definite amount of information for the practical workers. Statistical accounting only records the completion of research on a particular topic. But if, in the process of introduction, any areas that require additional work are revealed and, in the final analysis, the project, practically speaking, will not be introduced, it will nevertheless be considered by the report as having been introduced.

The decree of the CPSU Central Committee, entitled "Increasing the Role of the Institute of Economics, USSR Academy of Sciences, in Developing the Key Questions of the Economic Theory of Developed Socialism," establishes that the introduction of completed developments is considered to be a very important task of the economic scientific-research institutions. In this regard, the question arises concerning the need to give an objective evaluation to the work of the scientific institutions on the basis of the sufficiently complete accounting of the developments that have been introduced and used. It would be desirable for USSR TsSU [Central Statistics Administration] and GKNT VNTItsentr to accelerate the practical resolution of the questions of accounting the introduction of the completed projects in economic science, and this will promote the reduction of the period required for the "scientific research to production" cycle. We are far from the idea that it is necessary to expand the collection of information and to increase thus the volume of projects with the consequences resulting therefrom. This can be done by means of a reduction of the unnecessary information, the simplification of individual links over which it travels.

It is also necessary to increase the requirements on the results of scientific research as the object of planning for the introduction into production. Practical experience attests to the fact that the periods of time necessary for developing problems do not coincide in many instances with the needs of production or science itself. There are many reasons for this, but primarily

it is the not always satisfactory quality of the developments. The research results that are offered for introduction frequently are of a general and unspecific nature, and this hinders their use in production or as a concrete administration decision. This pertains especially to the developments provided by the institutions of higher learning. The higher educational institutions of UkSSR Minvuz [Ministry of Higher and Specialized Secondary Education], where economic-contract topics predominate, failed in 1984-1985 to provide a single development for inclusion in the State Plan for the Economic and Social Development of the republic, despite the fact that they fulfilled almost 57 percent of the total completed developments.

In UkSSR the plans for introduction are formed chiefly from the projects at the scientific institutions of UkSSR Academy of Sciences, and also the branch scientific institutions.

Random inspections indicate that the economic-contract projects being fulfilled chiefly for specific enterprises resolve narrow tasks of a departmental nature. Frequently the research on one and the same problem at enterprises in one and the same branch is carried out by different scientific institutions, and this leads to the dissipation of of the funds and duplication of the subject matter being researched. Provision is not always made for the prompt preparation of the scientific and practical recommendations for the needs of production on the basis of the achievements of the fundamental research in political economics. Frequently, scientific research on various economic phenomena begins when practical life reveals their negative effect upon production. However, science must be out in front, it must foresee the possible path of development of the economy. This can be achieved in full measure only in the event that the scientific institutions and their subdivisions switch over promptly to the development of new tasks both of a theoretical and an applied nature.

Scientific collectives should direct their research toward studying the tendencies in the development of the economy, and the prompt resolution of the new problems that arise. However, individual collectives, and especially branch ones, instead of carrying out scientific research with scientifically substantiated conclusions for practical activity, carry out projects which are being successfully fulfilled or which should be fulfilled by economic or statistical services of ministries, departments, associations, and enterprises. In the subject-matter plans one encounters plans involving the analysis of the economic activity of enterprises, the preparation of reports, the development of plans for the economic and social development of cities, etc. All this gives rise to a large number of small-scale developments with no particular immediacy. The time has come to create a data bank concerning completed research, so that the data can be used when planning the development of economic science.

It is necessary to increase the demandingness toward the completed developments being offered on the part of the ministries, departments, associations, and enterprises. The problems of developing a particular branch are well known to the managers and specialists in the appropriate ministries and departments. Therefore they must pose, ahead of time, specific tasks for the scientific-research institutions and institutions of higher learning.

However, this requirement is not always observed. Frequently, after the execution of the research it becomes apparent that the completed project has already lost its immediacy, and that is the reason why complaints arise against science for the lack of promptness in preparing materials, for failure to meet deadlines, etc. This leads to a situation in which, in the overwhelming majority of instances, the enterprises and associations, as well as the ministries and departments, prefer to resolve the economic problems by the in-house method The economic scientific institutions are given a secondary, auxiliary role. In addition, the ministries and departments, after ordering a definite topic, fail to give the proper attention to the testing of the completed developments. Therefore their introduction does not always yield the expected result. It would be completely justified if the only developments that were recommended for introduction were those that had undergone production testing, in which the ministries and departments should take the most active part.

Something that requires substantial change is the system of providing incentives for the labor performed by the scientific workers. The payment for their labor, according to our deep conviction, must be differentiated depending upon the results of the scientific activity.

Many of the proposals that have been expressed for improving the introduction and use of the results of economic developments can already be implemented, and several of them are already being carried out. In UkSSR, definite steps are being taken in that direction. Methodological Recommendations for the Introduction and Use of Completed Developments Dealing With Economic Problems have been developed and were approved during the current year by UkSSR Gosplan and UkSSR Academy of Sciences. A single, scientifically substantiated procedure has been established for planning them for the economic agencies and scientific institutions at all levels of planning in the republic, as well as monitoring of their fulfillment. The Methodological Recommendations are intended for all ministries, departments, their institutions and enterprises, academy and branch scientific-research institutions, and higher educational institutions, as well as the republic's planning and design organizations that resolve economic problems.

The scientific-research projects on economic problems, the practical introduction or use of which is being carried out in conformity with these instructions, include the completed theoretical and applied economic research, and the experimental projects being carried out on the basis of the state plan and the plans for scientific-research projects. The carrying out of scientific research, the bringing of them to the stage of the obtaining of practical recommendations and proposals, and their introduction into production are considered to be a very important task of scientific institutions.

The Methodological Instructions contain a definition of the projects that can be considered to be completed. They are exploratory and theoretical economic research projects, if they have been fulfilled in the planned volume, and have yielded results having concrete theoretical or practical significance, if the necessary recommendations have been worked out and approve for the agencies that administer the national economy, if a scientific report has been

prepared, an evaluation has been carried out and the results of the research have been accepted by a scientific council, and if positive responses have been received from organizations, scientists, and practical workers. These also include applied economic research projects and experimental projects if they were carried out in the planned volume and have resulted in the development, approval, and acceptance by the customer for introduction of methodologies, statutes, recommendations, normative documents, and economic-mathematical models that regulate various aspects of production-economic and social activity, that have undergone production testing, and that guarantee the obtaining of an economic, social, or other benefit. These projects are considered and approved by the ministries, departments, associations, or enterprises on the production orders of which they were fulfilled; official findings are issued concerning them, or official orders are promulgated, attesting to the possibility of their practical introduction into production or their use for the making of administrative decisions.

A large amount of attention is paid to the production testing of the completed developments. It must be carried out by the ministries, departments, associations, and enterprises with the involvement of the development specialists for all the completed research that has been included in the plan for introduction at all levels of planning. For the most important national-economic problems, it is desirable to carry out an economic experiment with the direct participation of scientists in it.

Provision has also been made for the clear-cut distribution of the economic developments into those that are to be introduced and those that are to be used, as corresponds, in principle, to the statutes of the USSR TsSU. The former group includes: methodological recommendations, methodologies, norms, standards, state standards, and other development in the area of economics, the organization of production, labor, or administration. The second group of developments is made up of forecasts of the development of the national economy, report memoranda on the results of the analysis of tendencies and phenomena occurring in the national economy, scientific reports, monographs, scientific transactions, articles, and teaching aids.

The introduction and use of the results of the completed economic research means their practical application in social production and administration and in the social sphere on the basis of coordinated plans, programs, or decisions, which must be confirmed by the appropriate documents. All the applied developments that have been stipulated by the plan for scientific research must have a specific customer; this will make it possible on a more substantiated basis to resolve the questions of the introduction of the completed economic developments. The stipulated assimilation of the developments is reflected in the plans for introduction at various levels of planning.

An important condition for the introduction of developments that are proposed is their advantages over the previously used ones. They must guarantee an increase in the assigned volumes of production and labor production, the efficient use of the material, financial, and labor resources, the improvement of working conditions, and the rise in the workers' welfare on the basis of an

increase in the effectiveness of production. This data must be confirmed by introduction documents.

Another kind of output of scientific institutions -- scientific reports and memoranda, monographs, articles, reference works, textbooks and teaching aids, as well as other materials -- is used in the spheres of administrative and organizational activity, science, education, and indoctrination, and information. This is reflected only in the introduction plans of scientific institutions and institutions of higher learning by an independent section -- "The Use of the Results of Scientific Research."

Clear-cut delineations between the duties and responsibilities borne by the developers and those borne by the customers are being established. Scientific-research institutions and institutions of higher learning guarantee the submittal of the completed developments by the established deadlines and also guarantee the reliability and practical significance of the scientific conclusions and recommendations. In turn, the ministries, departments, associations, enterprises, and organizations are obliged, within a three-month period, to consider the developments that have been submitted for introduction, and in the event of approval must use them in production and render the scientific institutions practical assistance in conducting a production test of the scientific conclusions and recommendations. The responsibility for the prompt introduction of developments is equally borne by the ministries, departments, enterprises, associations (consumers) -- for the organization of the introduction -- and by the scientific institutions (developers) -- for its methodological support.

An important factor in the successful organization of the work of introducing the results of economic research into the practice of socialist management is the inclusion of the completed developments in the state plan for the economic and social development of the republic, and the plans of the ministries, departments, associations and enterprises, scientific institutions, and institutions of higher learning.

In UkSSR the plans for the introduction of completed developments used to be earlier developed in many ministries and departments. However, the assignments for the introduction of completed developments dealing with economic problems were not included in the state plan until 1984. The two-year experience in the development of these assignments attests to their great mobilizing force, which promotes the increase in the rate of results achieved by economic science and the intensification of its influence upon the increase in the effectiveness of the branches of the national economy.

For 1984-1985 the State Plan for the Economic and Social Development of UkSSR includes assignments for the introduction of 20 very important scientific-research developments dealing with economic problems. They contain the resolution of critical questions of improving the use of reserves in production, the increase in labor productivity, the reinforcement of labor and production discipline, the development of brigade forms of the organization of labor, the dissemination of advanced experience, and the organization of socialist competition. In particular, in 1984, 430 enterprises of 12 ministries introduced measures that were developed by the Institute of

Economics, UkSSR Academy of Sciences, for the reinforcement of labor and production discipline. The introduction of these measures in construction organizations and at enterprises of the building-materials industry alone guaranteed in the first half of 1984 a 13 percent reduction in the work-time losses caused by absenteeism, tardiness, and administrative leave.

The 1985 plan includes assignments for the introduction of methodological recommendations dealing with the accounting and balancing of manpower at the industrial enterprises of 11 republic-level and union-republic ministries, and recommendations for the reinforcement of labor and production discipline at 1121 enterprises of UkSSR Minbyt [Ministry of Consumer Services]. The machinery-repair enterprises of UkSSR Minpishcheprom [Ministry of the Food Industry] are introducing recommendations dealing with the development of brigade forms of the organization of labor, with payment based on the final result.

All these measures are aimed at increasing the contribution made by economic science to the acceleration of the intensification of the national economy, at increasing the effectiveness of social production, and at resolving the tasks that were posed by the April 1985 Plenum of the CPSU Central Committee.

5075
CSO: 1820/29

KHACHATUROV RIDICULES BOURGEOIS CONCEPT OF SOCIALIST ECONOMY

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 10, Oct 85 pp 98-106

[Article by Academician T. Khachaturov: "A Critique of Bourgeois Conceptions of Socialist Economy"]

[Text] In bourgeois economic literature, one encounters many false interpretations of the true nature of the socialist economy. This is a manifestation of the ideological struggle that is becoming more and more heated in the present political situation, which makes the tasks of counterpropaganda particularly urgent. It is necessary to distinguish between the various approaches used by bourgeois antisocialist propaganda ranging from the most candidly hostile conceptions and insinuations to individual pronouncements that are sometimes couched in an outwardly "soft," "well-wishing" form, but that always incorporate bourgeois views in their content.

Representatives of various schools of bourgeois political economy criticize the socialist economy. Even before World War II, rightwing bourgeois economists L. Mises, F. Hayek and P. Schumpeter, who opposed Keynesianism and state intervention in economic life, declared one of the shortcomings of the socialist economic system to be its supposed lack of an economic mechanism for the rational distribution of society's resources. Nor did they refrain from direct hostile pronouncements. Thus, in a paper presented at the Sixth Congress of the International Economics Association in 1980, P. Samuelson deemed it necessary to report that, in the words of Schumpeter, his mentor, the USA fought with and against the wrong people in World War II. As a discussant of Samuelson's paper, the author of the present article sharply responded to such an impermissible attack.[1]

Rightwing bourgeois economists include monetarists M. Friedman, E. Phelps and others who have borrowed their ideas on equilibrium and "natural" unemployment from Walras. It is easy to see how they relate to socialist society if they declare even the protection of the working people by trade unions, the system of social assistance to the unemployed, and the establishment of the minimum wage in a capitalist state to be harmful actions that promote idleness and disrupt the economy's normal equilibrium. Similar pronouncements were made at a conference of the International Economics Association held at the Institute of International Economics in Kiel in 1984.

Nor do "neoliberals" by any means have a friendly disposition toward socialism. Using the views of Mises-Hayek to a certain degree, they regard the socialist economic and planning system as an overly centralized system that is controlled from a single center and that has no room for economic interests and incentives. They call this system a "command economy" in which a vast quantity of products are produced and consumed according to a centralized plan that is supposedly compiled exclusively according to administrative methods. This "command economy" is declared to be inefficient and to result in the useless expenditure of labor. According to Sovietologists, it originated shortly after the October Revolution as the economy of "war communism." And even though it has improved slightly since then, in their opinion it is still for the most part based on the administrative decisions of central planning agencies. When these agencies examine economic issues, they invariably arrive at irrational solutions. In this bureaucratic economic system, there is a monopoly on the decision-making process and society is not privy to either the decision-making or oversight process. The premise of the bureaucratic command economy is rehashed in various versions by numerous present-day bourgeois economists--G. Grossman, A. Nove, M. Bernstein, R. Carson and others. They deny the Soviet economy's achievements. They maintain that the contribution of technical progress to the growth of production is very slight. They regard the USSR as an underindustrialized power.[2]

Bourgeois Sovietologists describing the essence of the Soviet economy must know that their understanding of it as a "command" economy is a clear distortion of reality. It is known that the economic mechanism in the USSR, as in other socialist countries, presupposes in addition to economic planning the action of such economic categories as price, credit, profit, wages, and other forms of material incentive. At the same time, there are certain differences in the action of individual aspects of the economic mechanism in the USSR, German Democratic Republic, Czechoslovakia, Hungary, and other countries. These critics must be aware that the USSR is engaged in a large-scale economic experiment designed to increase the initiative and independence of enterprises while simultaneously raising their responsibilities for reciprocal contractual deliveries. Even the initial results of the experiment show of the economic mechanism (including the higher degree of initiative in plan fulfillment, responsibility, and material incentives) is on the right road. This has provided a basis for expanding the experiment to include a considerable number of new branches, associations and enterprises.

The experiment's measures are by no means alien to the socialist economic system. Back in 1979, a number of large-scale measures were adopted to improve the economic mechanism and to clarify the tasks and functions of planning, including long-range planning, and to improve the action of value incentives in short-range planning and capital construction. To a certain degree, they are a continuation of the economic reform of 1965. The principles of socialist economic management based on the combination of planning and value levers were elaborated in early 1920 at the behest of V. I. Lenin. Consequently, all this in general is nothing new to the socialist system. What is new is the improvement of management, planning and incentive methods in accordance with working conditions, the increased volume of

production, the all-round development of economic relations, and the growing sophistication of science and technology. All this has been reflected in party and government decisions on improving the management of the economy.

While the economic mechanism of some socialist countries has its own unique features, in all of them socialist ownership of the means of production determines the unity of social, collective and individual interests. It is specifically on the basis of this unity, the combination of interests and the striving to maximize the economic and social result that the socialist economic system functions.

Bourgeois economists try to find certain contradictions between the socialist principles developed by K. Marx and F. Engels and their practical implementation in socialist countries. They claim that V. I. Lenin and the communist party departed from Marxist theory in their development of the system of socialist management. Socialist revolution should have occurred in the industrially developed Western countries rather than in agrarian Russia. Therefor the bolsheviks were forced to operate not on the basis of Marxist theory but rather according to the practical needs of the given time. Bourgeois economists also refer to the fact that the socialist revolution did not abolish money and did not put an end to the division of society into classes. Under socialism even today there are supposedly groups of people with different, irreconcilable differences. R. Aron, for example, even went so far as to say that the exploitation of one person by another exists under socialism. They ignore the fact that socialist countries have a working class, the peasantry and the intelligentsia, that they are by no means antagonistic classes but rather social groups, that their interests are similar, that all of them work for themselves and for all the people and that the state's responsibility to coalesce all their interests with the public interest.

Sovietologist A. Nove, while noting the positive significance of the abolition of private ownership of the means of production and its transfer to the hands of the socialist state, also claimed that this transition meant the concentration of ownership of the means of production in the hands of the bureaucracy and determined the bureaucratic nature of the entire economy. In this connection, A. Nove attempts to distort the "interpretation" of Lenin's principle of the supremacy of politics over economics. In his opinion, this supremacy means that economic laws are replaced by the tyranny of the state. In reality, however, V. I. Lenin noted that "without a correct political approach to the matter, the given class will be unable to stay on top and consequently will be incapable of solving its production problem as well." [3] When V. I. Lenin said that politics is the concentrated expression of economics, he meant that economics and economic development find their concentrated expression in politics and determine the basic direction of the policies of the socialist state as the implement of class domination which makes the transition from capitalism to socialism.

In A. Nove's opinion, the very fact that social or state ownership of the means of production exists cannot lead to the fundamental change in the economic system in Russia or any other country. This opinion is in clear contradiction to both theory and practice. The establishment of socialist

ownership of the means of production in the USSR determined the advantages of the socialist economic system, national economic planning, the stable growth of production, the improvement of the entire system of social relations, and the betterment of the people's well-being.

In the opinion of G. Grossman, another "Sovietologist," as a result of the Soviet leadership's departure from Marxist theory and the necessity of managing the economy on the basis of practical needs, Soviet economic science came to a standstill and could offer nothing more than dogma. Effective economic management methods are rather to be found in the ideas and the arsenal of the bourgeois West. All this contradicts historical fact. The establishment of worker's control and the subsequent nationalization of the means of production foreseen by K. Marx and F. Engels; the establishment of the first organs of management of the socialist economy and the orientation of their activity the construction of communist society--all this is the realization of Marxist-Leninist theory.

Statements similar to those made by G. Grossman are typical of other bourgeois economists as well. For example, S. Cohn wrote that Soviet economic development can be viewed as a pragmatic reaction to conditions at any given time. There is also the opinion that theory that is revised on the basis of practical need cannot be the criterion of trustworthiness and progressiveness, that one and the same processes in the socialist system may be declared reactionary or revolutionary depending on whether they do or do not correspond to the leadership's current interests. This is an obvious distortion. Any theory needs to be tested in practice and it is entirely possible to refine theoretical premises that can and should be corrected by practice.

Some bourgeois economists reject the social form of ownership of the means of production. Thus, in the opinion of K. Haensel, a West German economist, it is not the forms of ownership but rather the systems for controlling the main economic processes that are the decisive element of an economic system. The alleged difference between socialist and capitalist economic systems is that the former is a system that is centrally controlled with the aid of physical indicators while the ladder is a decentralized system that employs monetary valuations. Such a distinction is without foundation. Haensel's statement contradicts the facts because planning is based not only on physical indicators, which often cannot be compared with one another, but value indicators as well.

Bourgeois economists deny the effectiveness of national economic planning altogether. Thus, A. Nove writes that centralized planning is incredibly complex, that plans are frequently not fulfilled, that information on their fulfillment is distorted, and that departmental interests are an insurmountable obstacle. His book on the economics of socialism is intended to vilify the socialist economic system in every way and to picture it in a distorted light.[4] Such a description of the socialist economic system contradicts reality.

The advantages of the socialist planned economy have been demonstrated in the practical development of all socialist countries. The purposefulness of plans

and their orientation toward improving the entire system of production relations and the entire social system have been of great importance. In the USSR, this has meant the transition to mature, developed socialism. In the future, it will lead to the highest phase of communism. In other socialist countries, it has lead first of all to the construction of developed socialism. Some bourgeois ideologues are unable to deny the advantages of the planned system--the possibility of purposefully altering the proportions and structure of the economy, the effective development of branches and regions of a country in the proper correspondence with overall economic progress, the attainment of high growth rates in production. American economists E. Hunt and G. Snerman, for example, note that "planning organs in socialist countries try to maximize social well-being rather than profits." The same point is made by J. Robinson and J. Eatwell, British neo-Keynesianism economists, who write that unemployment is nonexistent under socialism. "The high level of unemployment is an indisputable advantage of a socialist over a private economy." [5] Nor can bourgeois economists deny the trend toward mass consumption under socialism.

The issue goes beyond such admissions by bourgeois ideologues. Soviet planning experience has to a certain degree been used in state planning and regulation of the economy in capitalist countries. Naturally, such planning can only be "indicative," noncompulsory since the social basis of planning--social ownership of the means of production--does not exist under capitalism and the capitalist economy is dominated by the striving for maximum profit.

The socialist economy develops in accordance with long-range, scientific productions of national economic development based on the fundamental conclusions and principles of Marxist-Leninist theory.

Some bourgeois economists admit the advantages of socialist long-range planning but deny that it has any advantages for the short haul. They proclaim the system of planning to be especially imperfect for the present-day industrial stage of socialist development. In earlier stages, when the economy was less complex, it was still impossible to obtain information and regulate the activity of enterprises directly. But the higher the level of development and more sophisticated the economy becomes, the more difficult it is to manage directly and the more necessary it is to resort to decentralization and indirect management through the value mechanism and economic levers.

Accordingly, many bourgeois economists greeted the 1965 Soviet economic reform "approvingly" (from their own positions) in the belief that this was a step toward market socialism." There was talk of the "convergence" of the socialist and capitalist economic systems. Some bourgeois economists, J. Galbraith, for example, started linking convergence to the revolution in science and technology. Capitalism in the "postindustrial period" will supposedly increasingly become a society of consumers in which a new "quality of life" will form. Australian economist T. Wilczynski maintained that technical progress would make possible the convergence of capitalism and socialism into a communist society that would be "anti-Marxist based on communist technology." [6]

Similar views were also expressed by L. Albertini. "Modern societies," he wrote, "whether capitalist or socialist, are based on the same economic and social organization and model a type of person who has common features irrespective of the historical legacy and consequences of regimes." M. Schnitzer and P. Nordyke are of similar persuasion. "Full employment, price stability and economic growth are the basic goals of any economic system. A fourth goal--the equitable distribution of income--can be added to them." [7] Supposedly the only distinction is that the order in which these goals are attained varies from one country to another.

Such a conclusion can be reached only through superficial study of the economics of socialism. Characteristically, the hopes of bourgeois economists for convergence and for the development of a market economy in socialist countries faded with the passage of time and subsequent measures taken by our country to improve the economic mechanism in 1979 and the current large-scale experiment have not evoked the same interest and hopes as in the past.

Bourgeois ideologues, having suffered disappointment in their predictions, have begun speaking of "recentralization" in management of the Soviet economy, of the half-way character of measures, of continuing "extensive development," of the excessive degree of detail in planning, persistence of the main features and qualities that existed in the past and that characterized a "closed economy," and of the subordination of the economy to "ideological criteria."

Some bourgeois ideologues reject the notion of socialist economic features altogether. In the opinion of West German economist T. Talheim, productive capital under socialism is identical to capital at capitalist enterprises. One Social Democrat ideologue maintains that there is no true democratization in the management of the means of production in socialist countries.

At the same time, bourgeois ideologues frequently criticized shortcomings in the present planning system, its subjectiveness and arbitrariness, as well as red tape in the making and execution of economic decisions. They believe, for example, that prices under socialism are established arbitrarily and that this makes proper management impossible. They fail to mention th existence of an effective, scientific pricing system. Planning is proclaimed to be an administrative or political and by no means economic form of economic management. They ignore the fact that planning is based on the objective laws and conditions of economic growth, that planning is possible if the proportions and rates of development are truly determined on the basis of existing resources and avenues of their effective utilization.

It is specifically because of planning that our country was able in a historically period of time to overcome its age-old backwardness and to attain the leading edge in world science and technology. In its development, the Soviet nation is highly interested in utilizing the latest technology available in foreign countries. At the same time, the USSR has created various prototypes of new technology in metallurgy, in power engineering, in machine building, in rocket technology, in the extractive industry and in other branches. Numerous achievements of Soviet science and technology are eagerly received by other countries.

Bourgeois literature contains numerous hostile references regarding shortcomings in agriculture. It is acclaimed that the need for certain types of food is not always fully satisfied and that labor productivity is low. No consideration is given to the fact that the country has dramatically increased grain and livestock production on a collective basis. Demand for high-quality foods has also risen as a result of higher natural income and improvements in the material well-being of the people. Prices on these foods remain stable. The Soviet economic system has everything it needs to fulfill the Food Program, to secure the further growth of material base of agriculture, its mechanization and chemicalization, the development of the infrastructure and for increasing agricultural output.

Bourgeois economists cannot fail to see the advantages of the socialist economic system. As Sovietologist M. Lewin wrote, "Soviet growth rates were impressive and were directly instrumental in effectively raising Russia to the rank of a superpower in a very short time."[8] A. P. Samuelson directly posed the question: will the Soviet Union overtake the United States as the most prosperous society in the world? He answered this question in the negative. However in the last 15 years, there has been a sharp reduction in the gap between industrial production levels in the USSR and USA.

Bourgeois economists understandably do not wish to note the major social achievements and the rise of education, science and culture in the Soviet Union. And yet, 40 percent of the Soviet population is engaged in one form of education or another and 70 percent of the population above the age of 10 has higher and secondary education [sic]. Bourgeois economists G. Becker, L. Hanson, T. Schultz, T. Hewsen, R. Masgrev, and others, who have written a great deal about the importance of investments in "human capital," about its importance as an economic growth factor in capitalist countries, do not consider the creation of this key aspect of the economic potential of socialist countries.

The improvement of the well-being of Soviet people, the rise of their living standard and culture level, and the all-round development of the individual are the goal of socialism and the accomplishments of socialist countries in this area also characterize successes of the socialist economic system that bourgeois economists do not wish to admit. However they willingly speak of the slowdown of economic growth rates in socialist countries, which they consider to be primarily the result of inefficient economic management.

The old pronouncements of Mises, Hayek and Weber regarding the alleged inherent ineffectiveness of socialist economic activity are dredged up once more. These opinions are not shared by the more realistic-minded economists--A. Pigou and R. Hall, who acknowledge the advantages of crisis-free economic development and of intensive resource utilization under socialism.

The reasons for the declining growth rates in the USSR are discussed in a number of pronouncements. Thus, H. Heyman and H. Seidenstecher believe this to be the result of the increasing complexity of the economy, the development of the social division of labor, and higher production volume on the one hand and once again the trend toward total centralization of planning and

management--a feature of the "command economy" on the other. Bourgeois economists in the 70's and 80's expressed the belief that the long-term trend of Soviet economic growth would be characterized by mounting lag even though as we know the actual Soviet economic growth rates are higher than in a number of developed capitalist countries. "Soviet Economy in a New Perspective. A Compendium of Papers Submitted to the Joint Economic Committee, Congress of the United States" states that the USSR's economic difficulties will continue to mount and that planning and administrative manipulation will co-opt the new mechanism.

"Political Economy of the Soviet Union," a compendium of works by several well-known Sovietologists, including R. Campbell, H. Levine, and others, was published in 1984. Even if trade does develop, the Soviet Union is the only beneficiary. It is readily apparent that there is not the slightest grain of truth in these and similar statements. After the war, the Soviet Union helped socialist countries not only to restore their economies but also to establish highly developed industry and to produce goods they had never produced before. Examples: motor vehicles in Hungary and Poland, radioelectronics and computers in Bulgaria, GDR, etc. It is known that the Soviet Union supplies tens of billions of rubles and large quantities of all kinds of equipment and materials on credit to many countries including Cuba, Vietnam, Ethiopia, Angola, etc. Despite the sharp rise in oil and gas prices, the USSR has supplied these types of fuel to CEMA member nations for average world prices for the last 5 years. This has made it possible for socialist countries to purchase them from the Soviet Union for prices far below the world price. The Friendship oil pipeline, Union gas pipeline and Peace electric power transmission system were built for the purpose of supplying CEMA member nations with fuel and energy. A number of industrial enterprises for the production of raw materials, fuel, metal, chemical and other products are being built in a number of regions of the USSR that are entitled to participate in their joint operation. All these facts show that attempts by bourgeois economists to depict CEMA has an organization pursuing one-sided advantages for the Soviet Union are unfounded. CEMA, like all cooperation between socialist countries, will increasingly set itself the task of securing not only reciprocally advantageous trade but also productive integration and the joint resolution of major scientific and technical problems.

Our country is presently on the threshold of the regularly scheduled, 27th Congress of the Communist Party. Preparations for the congress include the task of determining ways of increasing the effectiveness of social production, the intensification, the growth of labor productivity and technical progress. Criticism of bourgeois distortions of our reality is of no little importance in the realization of these most important tasks. We must more clearly understand how to make fuller use of the advantages of the socialist economy, to accelerate our growth rate, to improve our entire economic system, to secure further socialist reforms, to raise the living standard and cultural level of the Soviet People.

FOOTNOTES

1. See: "Human Resources, Employment and Development." Edited by Shigeto

Tsuru. Volume I, 1980, pp 61, 89.

2. See: T. Kemp, "Industrialization in the Nonwestern World," London, 1983, p 67.

3. V. I. Lenin, "Polnoye sobraniye sochineniy" [Complete Collected Works], volume 42, p. 279.

4. See: A. Nove, "The Economics of Feasible Socialism," London, 1983, pp 79, 111.

5. J. Robinson and J. Eatwell, "L'economique moderne," Paris, 1973, p 392.

6. Wilczynski, "Technology in Comecon. Acceleration of Technological Progress Through Planning and the Market," London, 1974.

7. M. Schnitzer and T. Nordyke, "Comparative Economic Systems," Cincinnati, 1971, p. 607.

8. M. Lewin, "Political Undercurrents in Soviet Economic Debates," Princeton, 1974, p 191.

9. See: THE ECONOMIST, 20 April 1985. "Little Late in Learning the Facts of Life" by Daniel Franklin and Edwina Moreton. Comecon Survey," pp 3-18.

5013
CSO: 1820/39

END

END OF FICHE DATE FILMED

Feb 19, 86